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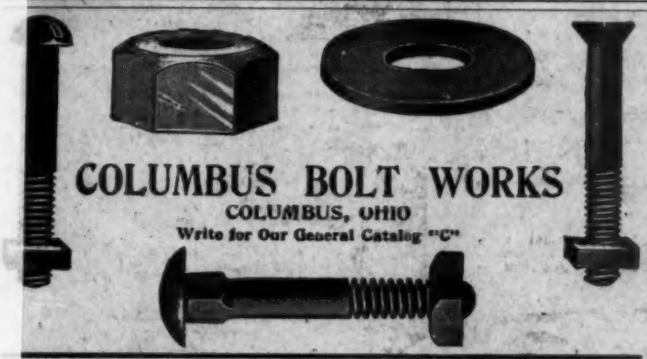
The American Artisan
AND HARDWARE RECORD

Vol. 47—No. 2. CHICAGO, JANUARY 9, 1904. $2.00 per Year.



COLUMBUS BOLT WORKS
COLUMBUS, OHIO
Write for Our General Catalog "C"

PURE ASPHALT ROOFING
Never Dries Out or Cracks
Our Tarred Ready Roofing, Slaters' Felt, Building Paper, Roofing Cements, Paints, Etc
WRITE US FOR PRICES
J. L. PERKINS & CO. 235 Lake St. CHICAGO

Never Will Leak . . .

American Seal Elastic Oil Cement will not get hard—always stays elastic.

Stops leaks in any roof—old or new, and will wear for years. Fix up the roof now and stop the leakage—in money and roof.

Use it on new work for jointing and 'round your skylights—follow it with a coat of American Seal Roof Paint—the best made—and the top of your house is safe for years. *Prices for the asking.*

THE WM. CONNORS PAINT MFG. CO.
TROY, NEW YORK
WESTERN AGENTS Dept. A. | J. L. Perkins & Co., 235 Lake St., Chicago. | Stockhoff Supply Co., 107 N. Main St., St. Louis.

"To discontinue your advertisement," says Ex-Postmaster-General John Wanamaker, one of the largest advertisers in the world—and naturally enough, one of the most successful business men,—"is like taking down your sign. If you want to do business, you must let the people know it. I would as soon think of doing business without clerks as without advertising."

TINNERS FIND EMPLOYMENT
By advertising and using THE POWERS AUTOMATIC CHIMNEY TOPS
They make chimneys draw, give tinners employment making stocks, and give the dealers profit.
Sold by Hardware Jobbers and Dealers.
Made only by POWERS BROS. STREATOR, ILL.
This cut free to dealers.

NOTICE.

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods. Branches in England and continent. References furnished.

ADDRESS
EXHIBIT & TRADING CO.
Main Office, 72 Henry St.
LIVERPOOL, - ENGLAND

WE MAKE

Stove, Tire and Carriage Bolts—Rods, Rivets, Machine Screws, Nuts, Hinge Pins and Special Bolts, Screws and Nuts of all descriptions

THE ATLAS BOLT & SCREW CO.
Cleveland, O.

Crying—to—do—business—without—advertising—is—like—winking—at—a—girl—in—the—dark;—you—know—what—you—are doing—but—nobody—else—does.

Black Diamond Files and Rasps
PERFECT—ALWAYS
TWELVE MEDALS AWARDED

AT INTERNATIONAL EXPOSITIONS
G. & H. BARNETT CO.
Black Diamond File Works, PHILADELPHIA, PA.

NICHOLSON FILE CO.
GENERAL OFFICES: PROVIDENCE, R. I., U.S.A.
Manufacturers of

FILES AND RASPS
NICHOLSON | ARCADE | GREAT WESTERN | EAGLE | "X. F."
KEARNEY & FOOT | AMERICAN | McCLELLAN | J. B. SMITH | GOLD MEDAL

GENEVA TOOL CO. Hand Agricultural Tools Geneva, O.

Regardless of price the value of IDEAL Boilers and AMERICAN Radiators is absolutely superior—a full measure. Twelve Warehouses—Quick shipments.

AMERICAN RADIATOR COMPANY

LAKE AND DEARBORN STREETS, CHICAGO

SPERRY'S CALDRONS

Twelve sizes always in stock.

Full measure, guaranteed perfect, original patterns, with metal distributed where it is needed. Many Caldrons are made from our castings as patterns. They are inferior to originals, as they have light bottoms and heavy sides and hold less.

D. R. SPERRY & CO. Hollow-Ware Founders, **BATAVIA, ILL.**

To The Hardware Trade:

Our SPECIAL HIGH QUALITY SLIM TAPER FILES with extra sharp cutting edges that have been extensively sold throughout the West and Northwest by Woodrough & Hanchett Co. of Chicago (now out of business) is still one of our LEADERS, and all orders on this class of goods will be filled direct or through your jobber.

MAYER & COMPANY

Manufacturers of

GOLD MEDAL FILES AND RASPS

NOT IN THE TRUST. BEST ON EARTH.

Philadelphia Pennsylvania

O-RIB-O

WARE

BRISCOE MFG. Co.

DETROIT.

"TABASCO" WATER HEATERS

All-Steel, Self-Feed Shaking Grate for Small Residences, Greenhouses, Flats, Hotels, Baptistries, Bath Houses, any place a supply of hot water is needed.

SEND FOR CATALOG

KEWANEE BOILER COMPANY

KEWANEE, ILL.

Chicago Store: 167-169 East Lake St., Chicago.

St. Louis Office: 518 Bank of Commerce Building.

BURTON'S FUEL ECONOMIZER

Attached to a stove pipe saves more fuel and radiates more heat than any other stove pipe attachment

AN EASY SELLER.

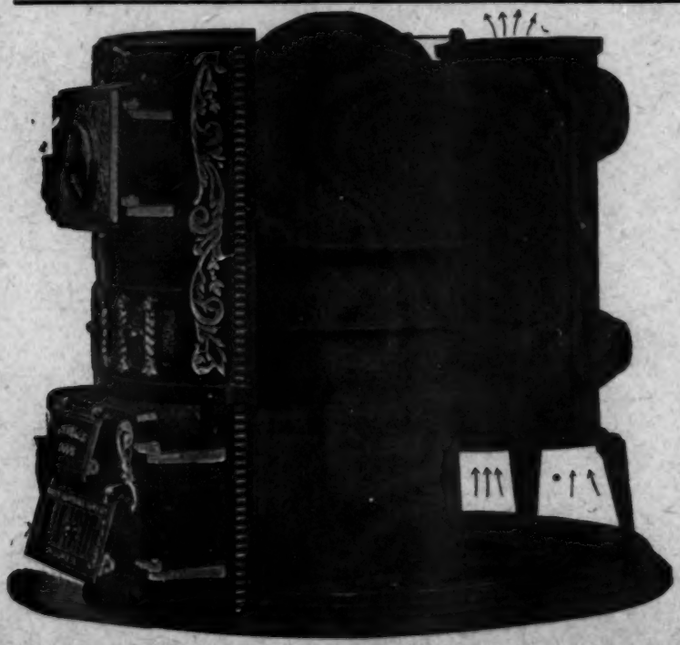
Assertions Backed by Guarantee.

The W. J. BURTON CO., Detroit, Mich.

32 Pages of Half-Tone Illustrations and descriptive matter of Cortright METAL SLATES and VICTORIA SHINGLES in our new Catalog. Shall we send it?

CORTRIGHT METAL ROOFING CO.

Philadelphia and Chicago.



The Crown "Low Down" Warm Air Furnace.

CROWN FURNACE

"LOW DOWN" TYPE

MADE IN 4 SIZES.

It has an extremely large amount of radiation for the size of the fire pot used. This furnace can be cleaned with the greatest facility.

It is made with smoke collar attachment and gas-burning arrangement when soft coal is used.

The furnace throughout is made extremely heavy and will stand severe usage

ASK FOR OUR 1905 FURNACE BOOK

March-Brownback Stove Co.,

POTTSTOWN, - - - PA.

QUICK MEAL

Gasoline and Oil

STOVES

ARE NOW READY FOR

1904

A number of changes have been made in the various lines of "Quick Meal" Gasoline and Oil Stoves. Every piece has been carefully watched and tested during the past season, and improvements have only been made where it was possible to add to SIMPLICITY, STRENGTH and APPEARANCE.

"Quick Meal" Stoves are the acknowledged leaders in their lines and so are the dealers who handle them. Now is the time to secure the agency for the coming season.

"Quick Meal" Gasoline Stoves Please Everybody.

"Quick Meal" Oil Stoves Work Well.

RINGEN STOVE CO. DIV. OF AMERICAN STOVE CO.

ST. LOUIS.

San Francisco, Cal.
45 and 47 Bluxome St.

Portland, Ore.
4th and Davis Sts.

1904

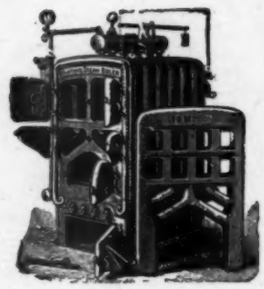
The Old Reliable

MANUFACTURERS OF
UP-TO-DATE HEATERS

Steam, Hot Water and Hot Air

BOYNTON'S STEEL DOME FURNACE.

We are making large additions to our works and output capacity, to meet the rapidly increasing demands of our trade.



The BOYNTON FURNACE COMPANY

NEW YORK CHICAGO

1904

"The way of the wise."

THOSE WHO PATRONIZE

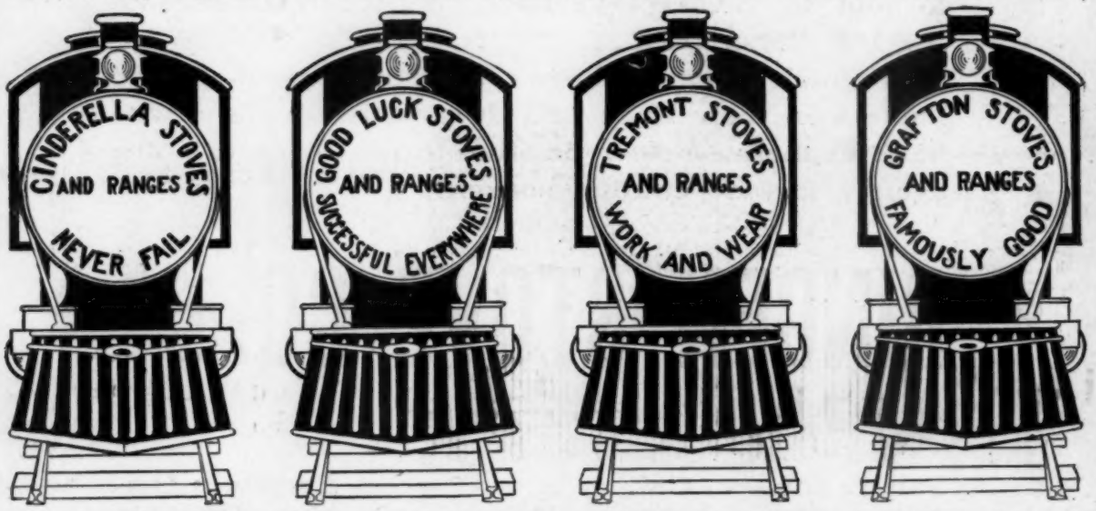
Cinderella Grafton

THE PITTSBURGH LINES

Good Luck Tremont

Are Sure To "Get There."

THEY BUY RIGHT—THEY CAN SELL RIGHT—THE GOODS ARE RIGHT.



Our progressive business methods and our modern goods, guarantee that merchants, who handle our lines, will have the "Right of Way" against competition—We solicit your trade on the basis of "Mutual benefit;" We want to demonstrate that

"There is no Sun like the Rising Sun and No Wagon like the Band Wagon."

W. D. SAGER, Chicago, Illinois, "Cinderella Line."

PITTSBURGH STOVE & RANGE CO., Pittsburgh, Pa.

TUTTLE-ALLEN STOVE CO., Kansas City, Mo. "Good Luck Line."

THIS IS ONE OF THE PATTERNS OF

MONITOR HEATERS

One of our best customers says, "It recommends and advertises itself, when properly put in."

He is, in our opinion, pretty well informed.

KEITH FURNACE CO.

Manufacturers :: DES MOINES, IOWA

Our complete catalog is yours
Write for it—we do the rest

U. S. CLINKER HOOK.

Everything is Quick, Easy and Clean.

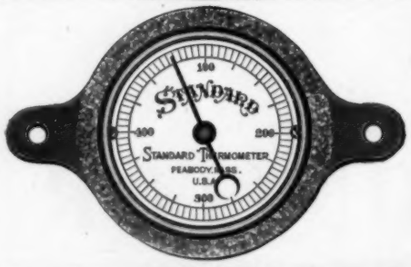
COAL,
TIME,
HEAT,
TEMPER,
CLOTHES, AND
GRATE ARE SAVED.

Manufactured Solely by the

U. S. WIRE MAT CO.,

OF DECATUR, ILLINOIS.

Write Us For Discounts.



There Are Leaders in Every Industry

Our No. 460 is the Leader of the Oven Thermometer Trade and it caters to the needs of the people. Send for circulars and sample—we want to talk business.

HELIOS-UPTON CO., Peabody, Mass.

HENRY GLEASON, Agent, 258 Broadway, New York, N. Y.

ACME OVEN THERMOMETERS

THE BEST IN THE MARKET.

GIVE THEM A TRIAL.

STYLE "C"

2⅝-INCH DIAL

MANUFACTURED BY

THE

EVANS STAMPING & PLATING CO.

TAUNTON - MASS.

C. H. MATTHEWS, Detroit, Mich.

(Western Agent.)

STYLE "D"

2⅝-INCH DIAL

The Aeolipyle

actually effects a saving in coal of fully 25%. It can be applied to any of the modern furnaces and boilers without any change whatever.

The Aeolipyle Co.

237 Water St., NEW YORK.

The Demand

for our catalogues is a heavy one, as the trade are realizing that the Forbes has marked improvements over any warm air heating furnace now in use. Let us send you a catalogue?

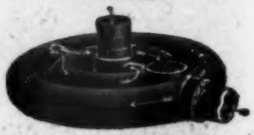
TUBULAR HEATING & VENTILATING CO., Philadelphia, Pa.

The Champion Hot Water Combination Heaters

They Fit Any Furnace

Base section when used without ring sections.

Ring section



These Heaters are made in five sizes diameter, and from 100 to 700 square feet radiation capacity.

Will heat those cold rooms or an addition to the building. Will increase the capacity of any furnace. Are cheaper than coils and will do more work.

Write for new circular. Manufactured by

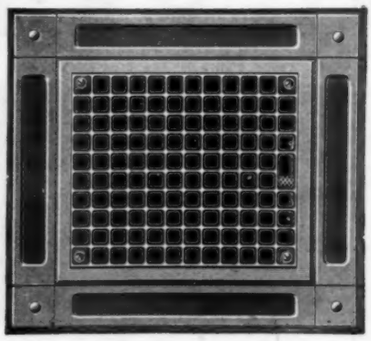
FRANK D. STOLZ

156 Webster Ave., CHICAGO, ILL.

Southnek & McElrath,

Moville, Iowa, write:

"Please take out our Want Advertisement. We have too many letters to answer."



The H. & C. WROUGHT STEEL REGISTERS

H. & C. Registers are packed separately in strawboard boxes, and being very shallow, take up little shelf space. . . . H. & C. Registers will not break or warp.

SAVE SPACE

SEND FOR CATALOGUE. Just Issued.

THE HART & COOLEY CO. Manufacturers, NEW BRITAIN, CONN. General Sales Agents, Stanley Works, New Britain, Conn. 79 Chambers St., New York. 19 Lake St., Chicago.

SUIT FOR INFRINGEMENT

OF AUER'S PATENT

Side Wall Register

Is pending in the Courts of District of Illinois.

BUY THE AUER, the original and best.

THE AUER REGISTER CO., TOLEDO, OHIO.

Royal Heaters.

MANUFACTURED BY THE

HART & CROUSE CO.

UTICA, N.Y.

ALL THE LEADING LINES OF

STEAM, HOT WATER & HOT AIR,

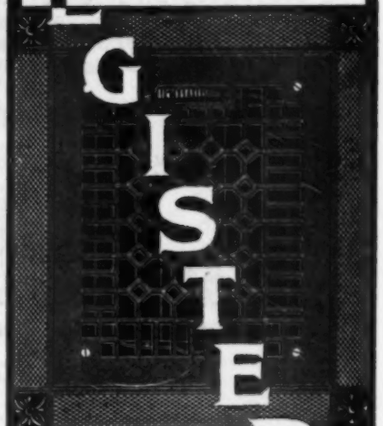
FOR HEATING ALL CLASSES OF BUILDING.

235 WATER ST. N.Y. COLUMBUS, O. BRANCHES. 29 LAKE ST. CHICAGO. ST. LOUIS.

REGISTERS.

WE MAKE RIGHT PRICES AND PROMPT SHIPMENTS

All Sizes—All Styles of Finish. Quality and Finish Unexcelled.



Henry & Scheible Co.

6-8-10 Long Street

CLEVELAND, O.

F. J. Brazda, Dodge, Neb., writes . . . . . .

"Please take 'Flanders circular shears' out of my 'for sale' ad. I sold them two days after they were advertised. As an advertising medium The American Artisan stands ***First*** in its class."

JOHN M. STOWELL, PRES.
CHAS. E. SAMMOND, VICE-PRES. & TREAS.
ROBT. MOSCRIP, SEC'Y.
T. W. FERGUSON, ASS'T SEC'Y.
A. J. RICKER, SUPT.

MAIN OFFICE AND WORKS: SOUTH MILWAUKEE.
CHICAGO OFFICE, 86 LAKE ST.
SAN FRANCISCO, RIALTO BLDG.
ST. LOUIS, 401 N. SECOND ST.
DENVER AND KANSAS CITY.

Stowell M'f'g & Foundry Co.

MANUFACTURERS OF

HARDWARE,

DOOR HANGERS & RAIL, HOT AIR REGISTERS & VENTILATORS.

BRASS, GREY AND MALLEABLE IRON CASTINGS TO ORDER.

Hay Tools
Shoe Lasts and Stands,
Tackle Blocks,
Wire Workers and
Plumbers Goods,
Wagon Malleables,
Chain Belt,
Etc. Etc.

ELECTRO PLATING
JAPANNING
TINNING
MACHINE
and PATTERN WORK
TO ORDER.

South Milwaukee, Wis. Dec,30,1903.

The American Artisan,

Chicago,Ill.,

Gentlemen:-

Enclosed find our order for quarter page "Ad" in your Journal for the coming year.

Our sales in Hot Air Registers this year doubled over the previous year and we attribute the result largely to our advertising,and no small share to the American Artisan,which we have found from experience is one of the best mediums to reach the dealers with our goods.

We enclose copy of our "Ad" for this week's issue.

Wishing you a Happy and Prosperous New Year,we are,

Truly yours,

Stowell Mfg & Fdry Co.

C E Sammond Treas.

Enc.
J.

QUOTATIONS SUBJECT TO CHANGE WITHOUT NOTICE. ALL AGREEMENTS ARE CONTINGENT UPON STRIKES, ACCIDENTS, AND OTHER DELAY UNAVIDABLE OR BEYOND OUR CONTROL.

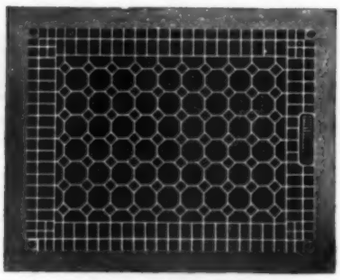
CAR LOAD BUYERS

Wall Register.

OF

REGISTERS

Will find it to their interest to get our prices before contracting for, or purchasing their 1904 supply



Floor Register.

L. J. MUELLER FURNACE CO.

191 REED STREET ESTABLISHED 1857 MILWAUKEE, WIS.

To the Readers of

The American Artisan

WE have a CONTEST now on for the Dealers and Customers, and we offer $100.00 in cash for the best answers. If you want to be in it with the best Trade and know all about it, address at once.

Stowell Hay Tools,

South Milwaukee, Wis.

WE are manufacturing a new line of Cheap OAKS and RANGES, especially for Jobbing trade.

We have one of the finest cheap Oaks on the market; also Range.

Write for prices and cuts.

TOLEDO STOVE & RANGE CO.

ST. LOUIS, MO. Branch Office: Manufacturers' Bldg., 14th and Locust.

TOLEDO, O. Main Office and Factory: Smead and Fitchland.

CHICAGO, ILL. Branch Office: 28 East Lake Street, Cor. Wabash.

CUT THIS OUT

To the Publishers **The American Artisan and Hardware Record**

69 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

Name.....

Address.....

Town..... State.....

A COUNTRY MILE

IS THE LEAD

MUELLER

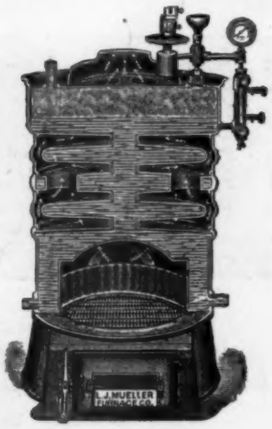
Furnaces and Boilers

HAVE OVER ALL OTHERS IN

POWER
DURABILITY
ECONOMY

WRITE FOR CATALOGUE AND PRICES

L. J. MUELLER FURNACE CO.



191 REED ST. ESTABLISHED 1857 **MILWAUKEE, WIS.**

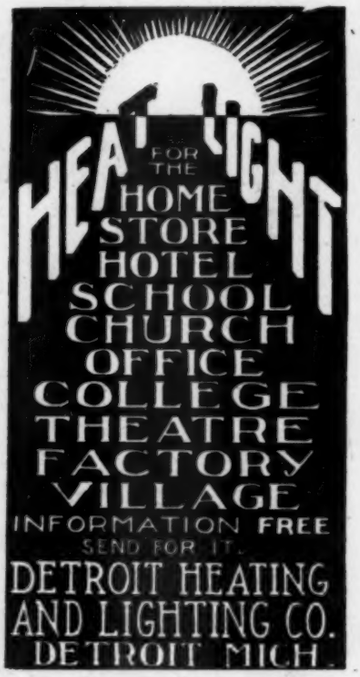
Floral City

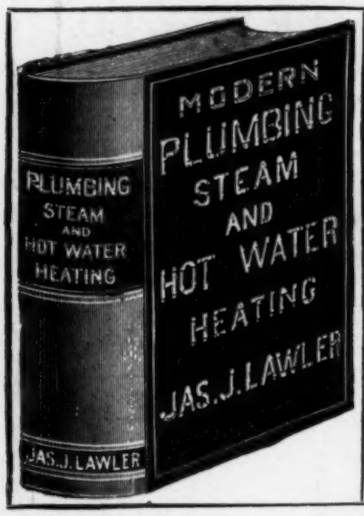
Hot Water Boilers, Steam Boilers are leaders. We have a full line of round and sectional water and steam boilers.

Write us for catalogue.

Monroe Foundry & Furnace Co.

Monroe, Mich.





MODERN SANITARY PLUMBING

STEAM and HOT WATER HEATING.

AN Encyclopedia of Practical Plumbing and Heating Work. By JAMES J. LAWLER. 400 pages large octavo. Size 6x9 inches. ***Price $6.00.*** This book is practical throughout. Its aim is to impart information that practical men can utilize in earning their daily bread and butter. It is the ready key to problems arising in sanitary and heating work, and has already taken its place as a leading practical authority in this field.

FOR SALE BY
DANIEL STERN, 69 Dearborn St., CHICAGO.

Compartment Sleepers
Standard Open Sleepers
Palace Parlor Cars
Table d'hote Diners
Luxurious Day Coaches

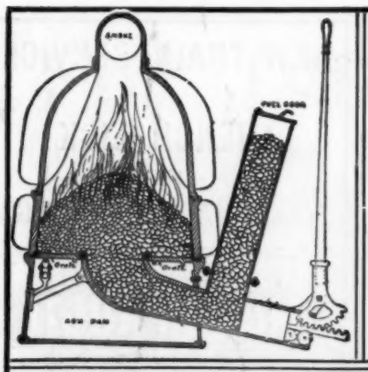
Are some of the many features of a trip over the

Big Four Route

CHICAGO to INDIANAPOLIS and CINCINNATI

Ask for Tickets via the "Big Four."

J. C. TUCKER, G. N. A.
238 Clark St., Chicago



The Under-Feed Furnace

BURNS SOFT COAL

A CHEAP FIRE. A LASTING FIRE. A CLEAN FIRE.

SAVES ½ YOUR COAL BILL.

If you are looking to the future in your furnace business; want satisfied and pleased customers; want every furnace set to prove a standing advertisement for the sale of others, let us send you catalogue and prices—**The Under-Feed fills the bill.**

WESTERN FURNACE AND FOUNDRY CO. : OMAHA, NEBR.

WEIR ALL STEEL GAS AND SOOT CONSUMING FURNACE.

THE HEAVIEST STEEL FURNACE MADE.

Absolutely Gas and Dust Tight. A Great Heat-Producer, but a Fuel Saver.

MANUFACTURED BY

THE MEYER FURNACE CO.

1300-1304 S. Washington St.,

Send for Catalogue. PEORIA, ILLS.

"The HANDY FURNACE PIPE"

Made with a View of Being Safe.

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

MANUFACTURED BY

F. MEYER & BRO. CO.

Send for Catalogue. PEORIA, ILLS.

Emperor Furnaces

FOR WOOD.

Simple, Safe, Durable. Economical in Fuel.

The Best and Cheapest Line of Wood Furnaces . . .
Furnished for either Brick or Galvanized Iron Casing.

SEND FOR CATALOGUE.

Bergstrom Bros. Co.

NEENAH, WIS.

Symonds' Wall Register

is the Simplest, Cheapest, Strongest, Quickest Installed, Easiest Operated, Best in Principle, Lightest for Shipment, Most Practical.

Write for Circular and Free Sample.

Shipments Prompt Satisfaction Sure.

SYMONDS MFG. CO., East St. Louis, Ill.

THE FARQUHAR ONE PIECE WELDED STEEL SELF-REGULATING FURNACE

Paintersville, O., Jan. 31, 1903.

FARQUHAR FURNACE CO., Wilmington, O.

Dear Sirs: Having had your furnace in use four years, allow me to say I am better satisfied with it at the end of each winter, and I have good reasons for it. Its self-regulating powers are so perfect that there is no waste of heat, making the cost of operation a very small item. I heat my entire house of ten rooms with less fuel than it took to run one stove. It will burn coal, rough wood and even sawdust very satisfactory. There is no bowl to crack or burn out and cause an extra expense in repairs. To my knowledge your furnace has no equal. Hoping you will make many houses comfortable during the winter season by placing your furnace therein, I am truly yours.

H. C. FAULKNER.

FARQUHAR FURNACE CO., Wilmington, O.

HERO FURNACES

Are best for cold climate

SMITH'S HOT WATER ATTACHMENTS

Can be used on any furnace

CHAS. SMITH CO.
CHICAGO, ILL.

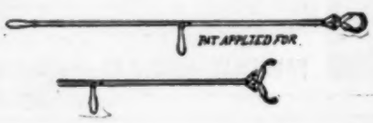
MODEL HUB C

The range that has more improvements than any range made. Investigate the advantages of the Sectional French Top in connection with Patent Broiler Hood.

Send for New Descriptive Circular just out.

SMITH & ANTHONY COMPANY, Boston, Mass.

Giant Clinker Tongs



The only certain device for removing CLINKERS from any kind of furnace. So simple that a child can operate it.

The "Giant" Tongs is the embodyment of Strength. Length, 64 inches—Distance from handle to claws, 38 inches, which leaves 26 inches for lifting leverage.

Those using steam, hot water or hot air for heating dwellings will appreciate the advantage of the "Giant" Tongs, in removing clinkers without dumping the fire. In this way the dealer is not called upon to go and see why the "Furnace does not heat," and show the customer that clinkers predominate in the fire pot, and of course could not give heat.

The "Giant" Clinker Tongs is all wrought iron, except the shield for handle (which is rubber), and should last a lifetime with ordinary care.

To see it is to buy it, no argument required.

Write for prices and get supplied now.

Made and for sale only by

CHAS. CLEAR
OR HIS AGENTS.

Also Maker of Clear's Sidewall Registers

1022 S. Broadway, ST. LOUIS, MO.

NEW TRAIN SERVICE TO FRENCH LICK AND WEST BADEN SPRINGS

MONON ROUTE
CHICAGO INDIANAPOLIS & LOUISVILLE RAILWAY

A parlor and dining car now leaves Chicago at 12:00 o'clock noon, arrives at the Springs at 8:45 P. M. Leaves Springs 9:00 A. M., arrives at Chicago 5:55 P. M. Reservations at Monon Route City Ticket Office, 232 Clark Street.

Telephone Harrison 1245.

For 1904

WHY NOT SECURE THE AGENCY FOR

KELSEY

WARM AIR GENERATORS

NEARLY 200 NEW DEALERS
during the last two years have bought and taken the Agency for "Kelseys."

NO OTHER HEATER
is like or can possibly compete with the KELSEY in securing the best results.

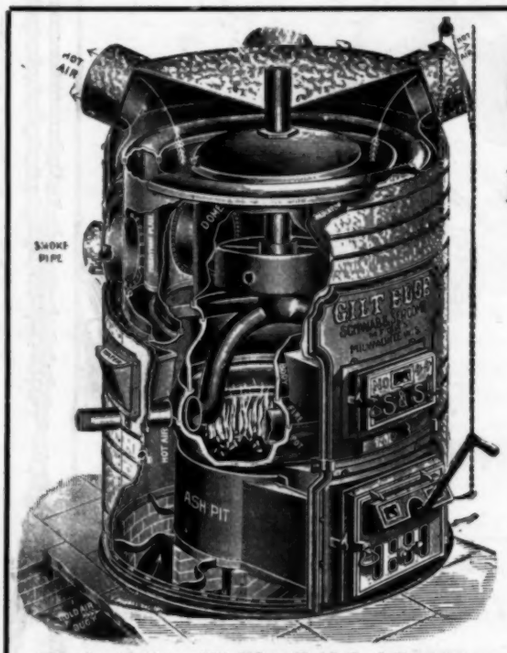
THESE GOOD RESULTS
from the thousands of Kelseys in use are bringing more and more business to "Kelsey dealers."

24,000 in use.
700 Dealers selling.

Send for Booklets—
"Kelsey Heating" and
"What the Users Say."

KELSEY HEATING CO., Makers, SYRACUSE, N. Y.

COOK & VAN EVERA CO., Chicago, Ill. NEW YORK OFFICE, 156 Fifth Ave.
JAMES SMART MFG. CO., Ltd., Sole Makers for Canada, Brockville, Ont.



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CHICAGO, JANUARY 9, 1904.

THE Seattle Trade Register is to be complimented on its handsome anniversary issue. A unique feature of this number is the cover, which shows Mt. Rainier, the patriarch of the Cascades, in all its grandeur.

THE Supreme Court of Nebraska held, in the recent case of Leidigh vs. Keever, that if one person employs another at an agreed price for a certain time, and the employment is continued after the expiration of the time agreed upon without any new agreement as to price, the presumption is that the parties understood that the original rate of compensation was also to be continued.

CONSUL-GENERAL MASON of Berlin, in a report to the State Department, states that during the year ending June 30, 1903, industrial and commercial conditions in Germany continued to recover from the collapse and depression which affected them during the summer of 1900. In nearly every branch of production dividends continued to improve, although in many cases they were derived more or less from artificially stimulated exports. But confidence seems to have been restored, and the conclusion of the new commercial treaties, of which there are nine or ten, with as many different countries, is alone requisite to secure for Germany another period of prosperity.

An order was recently received by the millers of Minneapolis from Chinese merchants for 400,000 bags of flour for Hongkong, equivalent to 100,000 barrels. This is said to be the largest single order for flour ever received in this country, and is regarded as the forerunner of an Oriental trade with the wheat districts or flour mills of the Northwest whose proportions cannot be measured. The opening of this new market for Minnesota flour has had the effect, so it is said by experts on the Minneapolis board of trade, of raising the price of wheat about 7 cents a bushel. It has created such a demand for wheat at Minneapolis that the millers are scouring the wheat regions of the trans-Mississippi Southwest for the supplies they cannot get nearer home. The receipt of an order of such magnitude by a milling city in the heart of the continent is a fact of portentous significance. It was made possible only by the low rates of transportation which have resulted from the concentration of traffic on leading western railroads.

SOME interesting facts about present conditions in Hawaii are presented by the Department of Commerce and Labor through its Bureau of Statistics. These facts reached that Bureau in the Hawaiian Annual for 1904, which arrived on the opening day of the new year.

Regarding population, the figures show a steady decrease in the number of natives and a steady increase in the number of persons of foreign births, especially Japanese and Chinese. In 1872 the number of natives was, in round terms, 50,000, and in 1900, 30,000. In 1872 the number of Chinese was, in round terms, 2,000, and in 1900, 25,000. The record of Japanese among the population only begins with 1884, when the number was 116 persons, but in 1900 the number was over 61,000. The total population of 1872 is given at 56,897, and in 1900 at 154,001.

Sugar, of course, continues to be the principal crop of Hawaii, though a number of other tropical products are now receiving careful attention, including coffee, tobacco, sisal fiber, manila hemp, vanilla beans, and pineapples. The experiments with sisal grass, begun within the past two years, have given great encouragement and lead those engaged in the experiments to the belief that Hawaii may become an extensive producer of that valuable fiber, of which the importations into the United States amount to more than $13,000,000 per annum in value and steadily increasing.

A Study in Statistics.

"THE Progress of the United States in its Material Industries" is the title of a statistical statement presented by the Department of Commerce and Labor through the annual report of the chief of the Bureau of Statistics. The table pictures conditions in the great industries and material interests of the United States in 1903, where such figures are available, and compares those conditions with those of earlier years, running back, where possible, to the year 1800.

Area, population, wealth, public debt and the interest thereon, gold and silver production, money in circulation, savings-bank deposits and depositors, value of money of the country, value of farm products, imports and exports of principal articles and total of imports and exports, railways in operation, number of postoffices, receipts of the postoffice department and many other subjects indicating in various ways the financial, industrial and commercial condition of the country are included in the tables, which give opportunity to compare present conditions with those of earlier years. In area, for example, the total in 1903 is 3,025,600 square miles, against 2,980,959 square miles in 1850, and 827,844 square miles in 1800.

These figures do not include Alaska or the islands belonging to the United States.

The population in 1903 is stated at 80,372,000, against 23,191,876 in 1850 and 5,308,483 in 1800. The wealth of the country is stated at 94 billions of dollars in 1900, and presumably 100 billions would not be an unreasonable estimate for 1903, while for 1850 the wealth of the country stood at 7 billion dollars, no estimate being given for any year earlier than 1850. The per capita wealth is set down at $1,235 in 1900 and $307 in 1850, having thus more than quadrupled meantime. The interest-bearing debt in 1903 is 914 million dollars, against 1,724 millions in 1880 and 2,046 millions in 1870. The per capita indebtedness of the country in 1903 is $11.51, against $60.46 in 1870, and the interest per capita 32 cents in 1903, against $3.08 in 1870.

Gold and gold certificates in circulation in 1903 for the first time exceeded one billion dollars, or, to be exact, 1,031 millions, against 810 millions in 1900, 232 millions in 1880, and 25 millions in 1870. The total money in circulation in 1903 is 2,367 million dollars, against 1,429 millions in 1890, 973 millions in 1880, 675 millions in 1870 and 435 millions in 1860. The per capita money in circulation in 1903 is $30.21, against $26.94 in 1900, $19.41 in 1880, and $13.85 in 1860. Deposits in savings banks in 1903 are 2,935 million dollars, against 1,524 millions in 1890, 550 millions in 1870 and 149 millions in 1860. The value of manufactures for the census year 1900 is given at 13 billions of dollars, against 5 1-3 billions in 1880, and less than 2 billions in 1860. Railways in operation in 1902 are 203,132 miles, against 166,703 miles in 1890, 93,262 miles in 1880, 52,922 miles in 1870, 30,626 miles in 1860 and 9,021 miles in 1850.

Labor and Capital.

CAPITAL is a vampire sucking the blood of the workingman; the entrepreneur of to-day is the successor of the robber baron of feudalism; labor is a twentieth century Laocoon struggling against the serpentine embraces of a domineering plutocracy. A poinard plunged into the heart is a better fate than being forced to grovel in degradation by toiling under the blacksnake of tyrannous wealth—these are the nauseous doctrines red-handed anarchy would inculcate; the poisonous fumes with which the Mosts and Goldmans, Luchenis and Czolgoszs would suffocate the virility of American labor and the harmony of American industrial life.

Happily our educated American workmen are not misled by blind harangues of blatant and unkempt agitators, nor do they see an industrial paradise in the advent of an era of riotous chaos, with a glut of rapine, lust and murder, in which civilization would disappear in a maelstrom of resurrected barbarism. The tendency of the times can plainly be seen to be toward an opposite state of affairs. The man who stakes his capital, which is but a synonym for accumulated labor, and the other man who gives the cunning of his hand or the strength of his arm to the same venture, are realizing more and more that their interests are cooperative and the more perfectly they approximate a plane of perfect equity the more perfect the harmonious understanding between these Siamese twins in the industrial show.

A proof that whatever abyss there may be between labor and capital is being bridged rather than widened comes to our attention from Philadelphia. Henry Disston & Sons of that city, whom every hardware dealer knows as makers of saws, files, rasps, etc., recently had the temerity to ask their 3,500 employes, by means of written letters, to be answered anonymously, whether or not they were satisfied with their wages and the conditions of their employment during 1903.

If the dicta of the beer-befuddled and vituperative anarchist contained a vestige of truth, about 3,499 of these workmen would have poured in tales of lurid dissatisfaction, and the only reason the 3,500th man's ink would not bubble with sizzling paragraphs pregnant with class hatred was that he forgot about the matter.

Well as an actual fact, just 12 men complained of their wages and conditions—12 out of 3,500. We think that other manufacturers will vote this Philadelphia firm a gold medal, as the concern who can keep 299 out of every 300 of its employes in a satisfied condition is certainly conducting its business in a spirit of consideration and equity.

The Philadelphia North American of Jan. 3 in commenting on this condition of affairs at this plant, said:

"In token of its faith in the loyalty of its employes and its certainty that no strikes are likely to occur to prevent it from filling its orders, the firm incorporated the following in a notice recently sent out to its customers:

"'We are entering the new year with the most pleasant and cordial relations between ourselves and our 3,500 employes.'

"This sentiment is assented to by all of the Disston workmen, excepting ten or a dozen. The way it came about is this:

"Instead of waiting for the men to prefer grievances, or to become discontented without openly manifesting their feelings, the firm addressed a written inquiry to all persons in the works, asking if they were satisfied with their wages and the conditions of their employment during 1903.

"They were invited to state frankly any grievances and to make any request which they thought might tend to improve and maintain harmony between them and their employers.

"All but a small number of the 3,500 replied that they were satisfied with the treatment accorded them by the firm and that they had never been importuned to join or to refrain from joining any labor or other organization by their employers.

"Some of the men who affixed their signatures to the responses have worked for the Disstons for half a century, and had a part in developing the plant from a small beginning to its present proportions.

"The Disstons believe that the obligations and relations of employers and employes should be mutual."

AMERICAN hardware men form bowling and baseball associations, but it remains for their British cousins to have started a Hardware and Metal Trades Musical Association.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

FROM some points of view the year so shortly started seems destined to be memorable. Unless all signs fail, it will witness the beginning of a number of improvements of great magnitude, the completion of which cannot fail to affect profoundly the transportation interests not merely of the country, but of the continent. In one case, indeed, the effects cannot be less than world-wide. I refer to the isthmian canal, the construction of which may perhaps be regarded as now destined to proceed without interruption. The completion of this great work cannot but affect materially the trade routes of the world as they exist today. Another improvement of smaller scope indeed, but still of high importance, is the project of the Pennsylvania Railroad to connect its system with Manhattan and Brooklyn by tunneling under the Hudson and East rivers. The Erie canal improvement in New York is a scheme of great magnitude, and the new transcontinenal railway in Canada will be a work of capital consequence to that country. Added to these, the demands for betterments on the railroads throughout the country will go to swell a demand for engineering skill and labor which should render the coming year one memorable in the annals of enterprise and industry.

* * *

THE following is a translation of an article from the *Taegliche Rundschau* regarding the establishment of American retail stores in Germany: "It certainly has not escaped the careful observer of our economic development that American commercial enterprises are systematically trying to gain a firm and lasting footing in the larger cities of Germany for the sale of American products by the establishment of retail stores. Wandering through the business streets of our large cities, these efforts of Americans become self-evident. Generally speaking, this was heretofore only the case with branches of a specifically American nature. Of late, however, the Americans appear also as competitors in the most varied branches of our home, large-scale industry. American competition has almost paralyzed some of our industries—for instance, those of typewriters, sewing machines and cash registers. Photographers' articles and musical instruments also form an important branch of American competition. Now the experiment is added to establish American shoe stores. The tendency of all these American establishments is, above all, this: to deal directly with the purchasing public, avoiding as far as possible all middlemen."

* * *

THE following interesting item is taken from the Marshalltown, Ia., *Times-Republican* of Dec. 22:

"Klove & Klove, a local hardware firm have closed a corn contest in which they gave a handsome steel range to the farmer bringing them the best half bushel of corn. There were about forty entries and the corn placed on exhibition proved to be a very high quality. The prize was won by A. M. Wall, a farmer living southwest of town. His corn was of the Reed's Yellow Dent variety, and was scored by Prof. Holden, of the Agronomy department of the Iowa State college, at 82. The corn scoring second highest was of the same kind and scored 81. Frank Poage had a sample of Silver Mine on exhibition, which scored 79½. Jud Tarman, living just north of town had a sample of the Reed corn, which Professor Holden pronounced the finest specimen he has seen this year with the exception of the corn not being fully matured. Properly matured, Professor Holden said that it would score at least 84, a remarkable score for corn raised under ordinary circumstances."

* * *

THE marked reduction in the exports of cotton goods from the United States to China in 1903, compared especially with 1902, has been the occasion of considerable anxiety and inquiry both on the part of manufacturers and those generally interested in the development of the foreign commerce of the United States.

* * *

THE window display which the King Hardware Co., Atlanta, Ga., evidently made a decided impression on some of the "new blood" on the Atlanta, Ga., *Journal*, judging from the following shining effusion appearing in that daily on Dec. 21st, last:

"No more sensational occurrence has happened on Peachtree street since the asphalt was laid than the uncovering of the large show window of the King Hardware Co. this morning.

"A reporter, seeing an unusually large crowd about the place, and being curious to learn what the matter of attraction could be, finally succeeded in elbowing his way to the front of the window where he beheld a big machine in motion which seemed to confirm the theory of perpetual motion.

"The window, which is large and attractive, is filled with the prettiest kind of toys all tastefully arranged, but the machine was, and up to the time of going to press, is still the center of attraction. A number of dainty incandescent lights are attached to the apparatus that give a pretty, scintillating effect to the whole window.

"It is no exaggeration to say that the elite and the hoi polloi are touching elbows to catch a glimpse of the place, while many a schoolboy is playing truant to race up the street beside the gamin to see the wonder. It would be difficult to give a description of this truly unique contrivance, but for the sake of those who haven't seen it, here goes.

"A large wooden frame in the shape of an electric fan has been set up facing the sidewalk, while on either side, in front and all round it are other similar devices, tastefully decorated and geared by pulleys and belts from beneath that set them whirling in ever direction when the current is turned on, for electricity is the power used. One wheel has cogs so arranged as to strike a xylophone that gives out a full octave which can be heard by putting one's ear against the window. Another wheel sets two Santa Clauses on a chariot race that beats Ben Hur all hollow. On account of being elbowed away to make room for others the reporter was unable to gather further details.

"To cap the climax a guessing contest has been arranged to give a handsome bicycle for a Christmas present to the one who guesses nearest the number of toys in the window. On account of some of them being in motion on the machine it is difficult to count them.

"The machine was designed and put up by Logan L. Mallard, a young inventor of the city, who is a special representative of the King Hardware Co. He has made many queer contrivances, but his closest friends say that this machine is the limit. At any rate, he and his enterprising firm are to be congratulated for this excellent attraction. The machine will probably be in motion until Christmas day. It is thought that a special officer will be detailed to ask folks to 'move on' so others can get a peep."

Poor reporter. If he had not been "elbowed away," think of the thrilling narrative he might have given us. Perhaps he could have worked his "the hoi polloi" in again.

News Siftings

The Ideal Stove & Foundry Co., Daleville, Ind., are looking for a location for a new plant.

Fred Schmoeger will, it is said, shortly open up a new stove polish factory in Sterling, Ill.

Edward Keener has been elected general superintendent of the Buffalo Co-Operative Stove Co., Buffalo, N. Y.

The Wormnest Stove & Range Co., Grand Rapids, Mich., will erect a warehouse, 115x60 feet in dimensions and two stories high.

R. F. Lewis and W. G. Estes are the incorporators of the Birmingham Stove & Hardware Co., Birmingham, Ala., capitalized at $100,000.

The plant of the Bogenshutz Stove & Range Co., Covington, Ky., has been purchased by John C. Droege and it will be placed in active operation by the first of next month.

The Wehrle Co., Newark, O., placed their stove foundry in operation on Jan. 4. It is said that their force of men are capable of turning out a thousand stoves a day.

The Dominion Iron & Steel Co., Sydney, N. S., manufactured over 140,000 tons of steel billets during the year 1903. Their average monthly output at present is about 9,000 tons.

H. M. Ebert, for a number of years with the March-Brownback Stove Co., Pottstown, Pa., had become associated with F. M. Borden & Bro., Philadelphia, Pa., in the capacity of general manager.

The Millom & Askam Hematite Iron Co., a leading English concern, declare that the most serious feature of the year's business has been the largely augmented importation of foreign iron and steel.

John A. Unglaub, Mary E. Unglaub and James G. Priest are the incorporators of the Economical Stove Co., Jacksonville, Ill., capitalized at $2,500 for manufacturing cooking and heating apparatus.

The iron trade in the Cumberland district in England is suffering a severe depression, as there are now only twenty furnaces in blast between Carnforth and Maryport, as compared with fifty in 1900.

It is said that the former plant of the Mississippi Valley Stove Co., at Fulton, Ill., which was purchased by Mr. Steele of the Chicago Stove & Range Co., will be placed in operation on Feb. 1 next.

The Lattimer-Williams Mfg. Co., Columbus, O., advise us of a material increase in their plant by the purchase and remodeling of adjacent property, 250x450 feet in dimensions, containing four buildings, each 50x 150 feet in dimensions.

The Buckwalter Stove Co., Royersford, Pa., send us a handsome 1904 calendar showing a young woman with her hair and corsage adorned with bunches of yellow roses, while the border of this calendar is profusely decorated with filigree work and poppies.

The Toledo Stove & Range Co., Toledo, Ohio, send us a little card which states: "We hope we have the honor to announce to you the marriage of our daughter Gem Stoves and Ranges to Every Stove Dealer of the United States, Toledo, Ohio, January the First, Nineteen Hundred and Four."

The S. M. Howes Co., 40-46 Union street, Boston, Mass., send us a postal circular which they are sending out to the trade, which calls attention to the fact that they carry a complete line of repairs to fit stoves, ranges and furnaces made in and out of New England. They make a specialty of large lines of New York, Pennsylvania and western repairs.

The Washington Stove Works, Everett, Wash., which started up for the first time in October last, have been running steadily until the present time. The works have been furnishing employment for ten men, but a full force of twenty men will be put on the first of next March. Up to the present time the output of the establishment has been ten stoves a day.

F. M. Borden & Bro., Philadelphia, will be represented by the following traveling salesmen during the ensuing year: C. M. Smyth in New Jersey, W. F. Habicht in eastern Pennsylvania, W. W. Farr in southeastern Pennsylvania, West Virginia and Maryland, and F. F. Saxton in Delaware, Maryland, District of Columbia and North and South Carolina.

The March-Brownback Stove Co., Pottstown, Pa., will be represented on the road during this year by Geo. H. Rotz in eastern Pennsylvania, New York, New Jersey and Delaware; Geo. M. Barr will look after their interests in western Pennsylvania, Ohio and Indiana, and Thomas A. Lewis in Illinois. Henry M. Miller will act as their representative in New York city and adjacent territory.

The Magee Furnace Co., 32-38 Union St., Boston, Mass., manufacturers of stoves, ranges and furnaces, will extend a hearty invitation to the trade to visit them and inspect their 1904 furnaces, which are goods of standard quality. This firm have some interesting changes in view for this year, concerning which they will advise the trade later through their traveling representatives and trade literature.

The Hess-Snyder Co., Massillon, Ohio, will be represented on the road during the present year by the following corps of salesmen: A. L. Snyder has eastern Ohio and Pennsylvania for his territory; F. E. Hess will look after the interests of the Boomer stoves and furnaces in western Ohio and Indiana; Charles Matthews will make his headquarters at Columbia, Mo., and W. L. McCloskey will do proselyting work in Iowa, Nebraska, Kansas and Missouri.

W. W. Strayer and W. L. Nesbitt, who are well known to the stove trade, have been placed in charge of the newly opened Minneapolis, Minn., salesroom and branch office of the Home Pride Range Co., Marion, Ind., manufacturers of the Home Pride malleable steel range. These men will also travel through Minnesota and North and South Dakota in the interests of these popular goods. O. C. Harrison has been placed in charge of the Milwaukee branch of this firm.

The Blakesley-Tuttle Stove Co., Kansas City, Mo., have been incorporated under the laws of Missouri to do a wholesale business in stoves and kindred lines. They will succeed to the business of the Tuttle-Allen Stove Co. The capital stock of $40,000 has been subscribed by A. M. Blakesley, F. C. Tuttle and G. W.

Blakesley. A. M. Blakesley will be president of the company, F. C. Tuttle will be vice president, and G. W. Blakesley will be secretary and treasurer of the company.

The S. M. Howes Co., 40-46 Union street, Boston, Mass., will be represented during the ensuing year by J. H. Brown in territory adjacent to Boston and sections of New Hampshire and Vermont; W. A. J. Marlatt in western Connecticut, western and eastern Massachusetts, New York city, Philadelphia, Washington and Baltimore; E. H. MacKenzie in a part of New Hampshire, Vermont and the state of Maine; R. B. Curtis in southern Massachusetts, western Connecticut and suburban Boston; William F. Gibbons in southern Massachusetts, and S. B. Smith in New York state and western territory.

Smith & Anthony, 48-54 Union street, Boston, Mass., will be represented during 1904 by the following salesmen, who will look after their line of ranges, heaters, furnaces, steam and hot water heaters, etc., as follows: C. R. Nelson in Maine, northern New Hampshire and northern Vermont; Geo. J. Day, northern Massachusetts, southern New Hampshire and southern Vermont; B. E. Mallory in Connecticut, Rhode Island and southern Massachusetts, and G. H. Tarleton in southern New Hampshire, eastern Massachusetts and a portion of the state of Rhode Island. E. L. Morandi and A. H. Boynton will look after their trade in hotel and restaurant goods.

The merits of Schill's ranges and furnaces, made by Schill Bros. Co., Crestline, O., will be presented to the trade by Chas. H. Green, Jr., in Iowa, Missouri and sections of Kansas and Illinois; H. L. Hoffman will travel in their interests in southern Wisconsin, northern Illinois and Indiana; C. A. Simonton will have western Pennsylvania as his territory; M. E. Conway will visit dealers in nothern Ohio and sections of Michigan; J. W. Roraback will look after dealers in northern Wisconsin and northern Michigan; J. Promenshenkel will do proselyting work with Ohio dealers; H. A. Potter will visit the Pacific coast and J. C. Shanks will visit Colorado dealers. This firm will have stocks of their goods carried at Denver, San Francisco and Minneapolis, Minn.

One of the best known and best posted of eastern stove salesmen is B. E. Mallory, for a number of years representative of the Richmond Stove Co., of Norwich, Conn. It is very doubtful if any stove salesman has a wider acquaintance with the New England stove trade than this gentleman, and he is recognized by a host of retailers as an old time-tried friend. His practical knowledge of the business is unusually thorough and his advice is eagerly sought by his many friends. Mr. Mallory has recently made a new connection and is now calling on the trade in the interests of the Smith & Anthony Co., 48-54 Union street, Boston Mass., makers of the well-known Hub line, and there is no doubt but that he will do even better with these excellent and popular goods than with the lines he has handled in the past.

The Bridgeport Crucible Co., Bridgeport, Conn., manufacturers of the Champion stove clay for lining any stoves; Climax furnace clay for lining furnaces, forges and similar goods, send us a very handsome 1904 calendar showing a beautiful reproduction of H. Farrer's painting entitled, "Edge of the Wood." This shows the reflection of a few trees in a pond, a profusion of shrubbery, a dead and fallen trunk in the foreground, a peasant woman gathering fagots in the background, and the road stretching along, making an exceptionally pleasing landscape. It is probably one of the best paintings of its kind in existence, as the technique is unusually excellent, the greatest attention having been paid to every minute detail. One of these calendars will be sent to the trade on application. When writing for same, kindly add "Saw it in THE AMERICAN ARTISAN."

A "SUPERIOR" BAND OF TRADE MISSIONARIES.

The Bridge & Beach Mfg. Co., St. Louis, Mo., will be represented on the road during 1904 by the following salesmen: Edward J. Fox will act as their trade missionary in northern Missouri and Carl W. Pfeffer in southern Missouri; John Le Page and Frank S. Hawken will divide Illinois territory, the former taking northern and the latter southern Illinois; A. Weiskirch and J. E. Ryley will do missionary work for Superior stoves and ranges in Kansas, the former taking the northern and the latter the southern section. O. F. Little will call on the trade in northern Iowa and T. L. Watson in southern Iowa; Jas. H. Little will visit dealers in northern Nebraska and South Dakota; H. M. Fenlon will have southern Nebraska as his territory; James R. Henry will care for the retailers' interest in eastern Texas and Louisiana, while Leo H. Booch will perform a similar duty in western Texas; Joseph V. Little will have Indian Territory and Oklahoma as his field of labor, and John J. Johnson will represent this house in Arkansas. F. T. Carroll has quite a reputation as a ground coverer, and he needs it, as his territory embraces the states of Alabama, Florida, Georgia, Kentucky, Tennessee and Mississippi. S. B. Buck will doubtlessly be well qualified a year from now to write an interesting article on the Rocky Mountains, as his territory, which includes the states of Colorado, Arizona, Montana, New Mexico, Utah and Wyoming, will give him a pretty well extended view of the back bone of the American continent. John C. Shieck will do proselyting work in California and Nevada, and F. W. Isherwood will not only look after the dealers in Oregon, Washington and Idaho, but will undoubtedly add a mite to the volume of the American export trade in stoves, as his territory also includes British Columbia. Henry C. Hoener and Robert C. Metcalf will look after the interests of this company in St. Louis.

STOVES IN 1903.

The Chicago Inter Ocean of Jan. 3 in a review of stove trade conditions in Chicago the past year says:

"Larger sales of stoves, furnaces and heating apparatus were reported by manufacturers here last year. A gain of fully 15 per cent was shown in spite of the fact that the effect of the previous year's coal strike

was reflected. Jobbers and manufacturers carried over liberal stocks of hard-coal stoves, but the gain represented what should have been sold the previous year. Total sales of the entire line reached about $14,500,000. The demand for soft-coal stoves was increased 10 to 15 per cent in addition to the 25 per cent increase shown in 1902, and manufacturers maintain that the average consumer has been educated to the use of bituminous coal and will not pay high prices for anthracite.

"The cost of labor was increased fully 10 per cent. Not so much so by an advance in wages as in reduction of working hours. Prices generally were lifted about 10 per cent to meet these conditions and the use of better material. The decline in price of iron was not felt by the majority of stovemakers in 1903 business. Besides, when iron was advanced 100 per cent formerly, stoves did not go up more than 30 per cent. There is a general disposition to maintain the increase in prices, as the manufacturer does not know when labor may make excessive demands. The past year, however, was free from any great trouble in matter of labor difficulties.

"Sales of furnaces increased 20 to 25 per cent. A larger amount of new building prevailed outside of Chicago, absorbing an increased output of wot-water and steam-heating apparatuses. Hot-air furnaces gained in a small way. Gas stoves were popular and sales were increased 10 per cent. Gasolene and ordinary oil stoves did well to hold their own, the higher prices for oil working against their sale."

DEATH OF HENRY A MATTHEWS.

The trade will learn with deep regret of the death of Henry A. Matthews, which took place at Southbury, Conn., Dec. 31, 1903. Mr. Matthews was in the 78th year of his age, having been born in Goshen, Conn., Nov. 24, 1825. At the age of 8 years went to work in a cotton mill, and five years later, with his parents, he moved to Waterbury, Conn., and was employed for five years in the web factory of Hotchkiss & Merrimen, becoming one of the most expert rubber inspectors in the country. He began manufacturing in 1850, and continued in business until 1865, when, owing to ill health, he gave up his business for five years. During the Rebellion he was one of the largest manufacturers of military accoutrements in the country, employing as high as 800 men, doing a business of $1,000,000 a year. In 1870 he returned to Waterbury and organized the firm of Matthews & Stanley. After five years, Mr. Stanley dying, the firm of Matthews & Willard, succeeded Matthews & Stanley. In 1876 he patented hollow stove knobs, the first of the kind provided with a screw, and in 1881 patented the stove urn or stove top ornaments. Mr. Matthews, while a thorough and efficient business man, has been public spirited as well, and has frequently been summoned by his fellow citizens to positions of honor and responsibility. While a resident of Waterbury he served in the state legislature in 1863 and 1864, and again in 1880 and 1881. In 1886 and 1887 he was member of the state senate. In 1884 and 1885 he served as mayor of Waterbury, and for a great many years he served continuously on the school board of that city. For fifty-one years has been an active and a prominent member of the Independent Order of Odd Fellows.

He was widely known, and universally esteemed for his many sterling qualities.

C. H. Matthews of the Ireland & Matthews Mfg. Co., Detroit, Mich., is his son.

MONARCH STOVES, RANGES AND FURNACES.

The Standard Stove and Range Co., 909-911 Liberty street, Pittsburgh, Pa., are employing 55 hands at their foundry. They expect to add a number of steel ranges and cast cook stoves to their line for spring trade. They send us their maiden catalogue calling attention to their Monarch line of stoves, ranges and furnaces. The Monarch gas range has baking and roasting oven, balanced oven doors, steel body, closed top with two open additional lids.

The Standard Monarch range with removable steel oven is made right or left hand. The oven is perfectly ventilated, the fire box is long and broad, the duplex grate is draw out, the flues are carefully proportioned to the fire box, the top of the range is large, with nickel band on edges. The nickel trimmings include towel rod, outside oven shelf, side motion kicker, swinging T shelf stands, lifter, ornamental low panel and Alaska knobs.

The Loyal Monarch range has large end ash hearth, nickel name plate, oven shelves and tea shelves and oven door opener and duplex grate.

The Prize Monarch cook has outside oven shelf, kicker, sectional back wall, cut crosspiece, extension back shelf, ash pan and swing hearth plate. Other stoves shown are the Monarch Franklin, Wood Nymph, Golden Oak, Defender, Monarch Cannon and Osceola.

The Hardware Record.

American Hardware Mnfs. Assn.

Pres., J. C. Birge, St. Louis, Mo.
Vice-Pres.—F. S. Kretsinger, Ft. Madison, Ia.; Henry B. Lupton, Pittsburgh, Pa.; Geo. W. Corbin, New Britain, Conn.
Secy.-Treas., F. D. Mitchell, Phila.
Ex. Com., C. W. Asbury, Philadelphia, Pa.; Chairman; Robert Garland, Pittsburg, Pa.; N. A. Gladding, Indianapolis, Ind.; Geo. P. Hart, New Britain, Conn.; Wm. M. Pratt, Greenfield, Mass.; W. S. McKinney, Allegheny, Pa.; E. G. Buckwell, Cleveland, Ohio; E. B. Pike, Pike Station, N. H.

Arkansas Retail Hdw. Dealers' Assn.

Pres., J. F. Maxey, Ozark.
1st V.-P., H. Williams, Hot Springs
2d V.-P., A. L. Skillern, Nashville.
S.-T., C. E. Taylor, Little Rock.
Ex. Com., C. T. Rosenthal, Batesville; T. B. Stewart, Newport; E. E. Mitchell, Morrillton; W. M. Graham, Clarendon; R. F. Roys, Russelville.

Chicago Retail Hdw. Dealers' Assn.

Pres., H. E. Gnadt.
V.-P., G. A. Neeb.
Sec., G. R. Lott.
Collector, John Hora.
Treas., J. L. Smith.

Hardware Merchants' and Manufacturers' Assn. of Philadelphia.

Pres., William C. Peters.
V.-P., Thomas Devin.
Sec.-Treas., T. James Fernley.
Directors, W. W. Supplee, H. McCaffrey, E. S. Jackson, W. C. Peters, S. Disston, E. Fisher, J. H. Ritter, T. Devlin, T. J. Fernley.

Illinois Retail Hdw. Dealers' Assn.

Pres., Charles H. Williams, Streator.
V.-P., W. T. Gormley, Chicago.
Sec., L. Nish, Elgin.
Treas., Geo. A. Engelhardt, Chicago.
Ex. Com., Charles H. Williams, Streator; W. T. Gormley, Chicago; L. Nish, Elgin; Geo. A. Engelhardt, Chicago; William Bittel, Peoria; F. F. Porter, Chicago; H. G. Cormick, Centralia; H. N. Murphy, Galesburg; R. G. Scheurer, Vandalia.

Indiana Retail Hdw. Dealers' Assn.

Pres., E. M. Bush, Evansville.
1st V.-P., A. N. Shidler, So. Bend.
2d V.-P., W. B. Shipley, LaFayette.
Sec.-Treas., M. L. Corey, Argos.
Ex. Com., M. L. Lewis, Marion; N. P. Lewis, New Albany; Charles Booushat Petersburg; E. M. Bush, Evansville; M. L. Corey, Argos.

Indian Territory Retail Hdw. Assn.

Pres., J. G. Smith, Canadian.
1st V.P., Fred Parkinson, Wagoner.
2d V.-P., E. C. Stretch, Vinita.

Iowa Retail Hdw. Dealers' Assn.

Pres., S. R. Miles, Mason City.
V.-P., L. Lindenberg, Dubuque.
Sec., H. S. Vincent, Ft. Dodge.
Treas., A. C. Vieth, Oakland.
Members Exec. Com., Jacob Seither, Keokuk; J. F. Doty, West Liberty; L. Lindenberg, Dubuque; S. R. Miles, Mason City; G. C. Paulson, Newhall; Paul DeVol, Council Bluffs; C. S. Barger, Albia; L. H. Kurtz, Des Moines; C. R. Keating, Mt. Ayr; L. A. Gnam, Carroll; C. E. Haas, LeMars.

Kansas Hardware Dealers' Assn.

Pres., Oscar Roehr, Topeka.
V.-P., E. J. King, Logan.
Sec.-Treas., J. A. Cole, Topeka.
Ex. Com., F. W. Bartlett, Kansas City; T. H. Kiniry, Beloit; J. M. Walters, Robinson; J. H. Hamilton, Arkansas City; T. J. O'Neill, Osage City.

Kentucky Retail Hardware and Stove Dealers' Association.

Pres., W. T. Oldham, Mt. Sterling.
1st V.-P., W. S. Shacklett, Fulton.
2d V.-P., Jos. C. Kirchdorfer, Louisville.
Sec., Paul Wagner, Louisville.
Treas., Henry Heick, Louisville.

Michigan Hardware Association.

Pres., John Popp, Saginaw.
V. Pres., F. M. Brockett, Battle Creek.
Treas., Henry C. Weber, Detroit.
Sec., A. J. Scott, Marine City.
Ex-Com., W. P. Culver, Portland; K. S. Judson, Grand Rapids; J. H. Whitney, Merrill; E. J. Morgan, Cadillac; T. Frank Ireland, Belding; Fred. S. Cook, Fowlerville; C. E. Pipp, Otsego; A. Harshaw, Delray; A. J. Scott, Marine City.

Minnesota Retail Hardware Assn.

Pres., W. H. Tomlinson, LeSueur.
V.-P., H. S. Cleveland, Minneapolis.
Treas., W. E. Barto, Long Prairie.
Sec., M. S. Matthews, Mnpls.
Ex. Com., W. H. Tomlinson, Le Sueur; H. S. Cleveland, Minneapolis; F. E. Hunt, Red Lake Falls; Benj. F. Kernkamp, St. Paul; C. H. Hornburg, New Ulm; J. Cowing, Alexandria; C. H. Casey, Jordan; C. F. Ladner, St. Cloud; J. Schmidt, Wabasha; A. T. Stebbins, Rochester; J. McGuire, St. Paul.

Missouri Retail Stove and Hardware Dealers' Association.

Pres., Tayler Frier, Louisiana.
V.-P., E. L. Wachter, St. Louis.
Sec., F. N. Neudorff, St. Joseph.
Ex. Com., J. W Poland, Carrollton; F. N. Kannsteiner, St. Louis; W. T. Shoop, Richmond.

National Hardware Association.

Pres., S. A. Bigelow, Boston.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Ex. Com., F. Barker, Elmira, N. Y.; J. D. Moore, Birmingham, Ala.; John Freeman, Detroit; P. E. Strauss, Boston; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. A. Kirk, St. Paul.

Nebraska Retail Hdw. Dealers' Asn.

Pres., C. A. Peterson, Oakland.
1st V.-P., Nathan Roberts, Omaha
2d V.-P., Alex Meyer, Hastings.
3d V.-P., Frank Hacker, Friend.
Sec.-Treas., Harry Hall, Lincoln.

National Retail Hdw. Dealers' Asn.

Pres., W. P. Bogardus, Mt. Vernon, O.
V.-P., C. H. Miller, Huntington, Pennsylvania.
Sec., M. L. Corey, Argos, Ind.
Treas., A. T. Stebbins, Rochester, Minn.
Ex. Com., H. G. Cormick, Centralia, Ill.; Sharon E. Jones, Richmond, Ind.; T. F. Ireland, Felding, Mich.; L. Lindenberg, Dubuque, Iowa; A. T. Stebbins, Rochester, Minn.

N. Dakota Retail Hdw. Dealers' Asn.

Pres., H. N. Joy, Hamilton.
1st V.-P., H. F. Emery, Fargo.
2d V.-P., Frank Lish, Dickinson.
3d V.-P., H B. Allen, Jamestown.
Sec., C. N. Barnes, Grand Forks.
Treas., W. H. Pinkerton, Lakota.
Ex. Com., E. E. Elliott, Sanborn; H. F. Strehlow, Casselton; Hurbert Harrington, Fargo.

Ohio Hardware Association.

Pres., W. P. Bogardus, Mt. Vernon.
V.-P., J. F. Baker, Dayton.
Cor. Sec., D. R. Burr, Piqua.
Fin. Sec., W. C. Jones, Columbus
Treas., H. A. Waller, Ravena.
Ex. Com. F. A. Powers, Norwalk Geo. Hartke, Cincinnati; E. Fisher Wapakoneta; J. C. Snyder, Ironton; E. M. Potter, Cleveland.

Pennsylvania Retail Hdw. Assn.

Pres., Geo. L. Moore, Brownsville
V.-P., Geo. J. Rudolph, Pittsburg
Sec., J. E. Digby, McKees Rocks
Treas., B. A. Maggine, Braddock
Ex. Com., E. E. Lyon, Greensburg; C. N. Savage, California; B A. Maggine, Braddock; C. O Shroyer, Dawson.

St. Louis Stove Dealers' Assn.

Pres., Wm. H. Hahn.
1st V.-P., G. A. Pauly.
2d V.-P., E. L. Wachter.
Sec., Louis Boehl.
Treas., E. Wertz.

Southern Hardware Jobbers' Assn.

Pres., W. M. Crumley, Atlanta, Ga.
1st V.-P., John Donnan, Richmond, Va.
2d V.-P., E. A. Peden, Houston, Texas.
Ex. Com., Bruce Keener, Knoxville, Tenn.; Chas. Ireland, Greensboro, N. C.; O. B. Barker, Lynchburg, Va.

Texas Ret. Hdw. and Imp'l't Assn.

Pres., S. L. Erwin.
1st V.-P., W. M. Grunnell.
2d V.-P., J. D Carroll.
Sec'y, J. W. McManus.

Wisconsin Hdw. Dealers' Assn.

Pres., L. Findiesen, Green Bay.
V.-P., H. L. McNamara, Janesville.
Sec.-Treas., C. A. Peck, Berlin.
Ex. Com., J. Kornelly, Milwaukee; E. H. Ramm, New London; H. S. Scofield, Sturgeon Bay; R. Murdoch, Beloit.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 36 to 40 inclusive.

T. O. Grimm is a new London Mills, Ill., hardware dealer.

Clement Dillery is about to open a hardware store at El Oro, Mexico.

Bozl Bros., Henderson, Minn., hardware dealers, are victims of a recent fire.

The hardware trade of Seattle has increased 500 per cent in the last decade.

W. E. Keen has purchased the hardware store of E. T. Barnett at Keensburg, Ill.

T. O. Anderson has purchased the hardware store of E. H. Mitchell at Coin, Ia.

McElvain & Son, Avon, Ill., hardware dealers have sold out to Geo. A. McFarland.

R. F. Mitchell has been appointed manager of the Dawson Hardware Co., Des Moines, Ia.

The Lansing Wheelbarrow Co., Lansing, Mich., are making a number of repairs in their factory.

Hibbard, Spencer, Bartlett & Co., Chicago, have increased their number of directors from 7 to 17.

Fire in the hardware store of Hubred & Sons, Hoffman, Minn., caused slight damage on December 25 last.

H. L. Campbell, Frankfort, Ohio, has purchased the hardware store of Perrill Brothers at Sabina, Ohio.

It is said that a lignite mine has been opened up near Jewett, Tex., by A. J. Jasper of New Boston, Texas.

The Fletcher Hardware Co., Detroit, Mich., gave a recent dinner at the Russell House to 25 of their employes.

The Meyers Shovel Co. have started their Beavers Falls, Pa., factory in operation with 200 men employed.

The American Axe & Tool Co. have re-opened their Beaver Falls, Pa., plant and have about 500 men at work.

The Eclipse Rolling Mill & Manufacturing Co., Birmingham, Ala., are erecting a rolling mill 30x90 feet in dimensions.

S. R. Slaymaker has purchased the entire padlock and French rim dead lock business of the Wilcox Mfg. Co., Middletown, Conn.

William Krueger, for a number of years in the hardware business at Neenah, Wis., died on Jan. 4 last. He was in the 73d year of his age.

John M. Heffley, for a number of years in the hardware business at Cameron, Texas, died on Dec. 21 last. He was in the 58th year of his age.

G. L. Settlemeier, J. T. Wood and Max Kreuger are the incorporators of the Litchfield Lamp Mfg. Co., Litchfield, Ill., capitalized at $5,000.

Schroeder & Cook, dealers in hardware, stoves and tinware at Victor, Iowa, have dissolved partnership by mutual consent, F. C. Schroeder having sold his

interest to W. C. Wilkins. The style of the new firm is Cook & Wilkins.

Edward Gibson, Wm. W. Gibson and Ralph Conrad are the incorporators of the Gibson Iron Works, Jersey City, N. J., capitalized at $60,000.

The Witbeck Hardware Co., Millburg, Mich., were visited by fire on Dec. 31, causing a loss of $6,000, $3,251 of which is covered by insurance.

C. E. Dunham, for a number of years in the hardware business at Bound Brook, N. J., died in that city recently in the 67th year of his age.

The American Steel & Wire Co. expect to resume operations shortly in their South Sharon, Pa., plant, giving employment to about 3,000 men.

C. W. Pank, for the past two years manager of the Kansas City branch of Fairbanks, Morse & Co., will hereafter have charge of their St. Louis branch.

The Orr & Lockett Hardware Co., 71-73 Randolph street, Chicago, had the heaviest Christmas business in thirty-one years during the holidays just passed.

The Dwiggins Wire Fence Co., Anderson, Ind., have purchased a second plant in that city which they are using for the manufacture of their wire fences.

Bert B. Wood, Elmer J. Marks and C. J. Bausch are the incorporators of the Western Improved Wire Fence Co., Bozeman, Mont., capitalized at $25,000.

W. J. Wolford, Spencerville, Ohio, has sold a half interest in his hardware store to T. M. Berry, and the firm will hereafter be known as Wolford & Berry.

At a meeting of the stockholders of the Standard Pulley Manufacturing Co., New Orleans, La., the capital stock of the company was fixed at $25,000.

Frank Evarts, Oscar T. Tamm and Edward Evarts are among the incorporators of the St. Louis Woodenware Works, St. Louis, Mo., capitalized at $180,000.

Sorenson & Mork, Wheaton, Minn., hardware dealers, were visited by fire on Dec. 29th last. Their loss is $25,000, $13,000 of which was covered by insurance.

Edward Meyer, W. A. Cherry and T. H. Morris are the incorporators of the Meyer & Cherry Co., New York, capitalized at $25,000, for dealing in hardware.

J. P. Koehler, Sr., L. C. Koehler and M. M. Tygard are the incorporators of the Pittsburgh Machinery & Gas Engine Co., Pittsburgh, Pa., capitalized at $10,000.

George Healley has sold his interest in the Wooley Foundry & Machine Works, Anderson, Ind., manufacturers of gas engines, to Rene Heritage and W. J. Wooley.

John A. Lee, E. A. Godfrey and L. L. Butterfield are the incorporators of the Paine Metallic Packing Co., Bridgeport, Conn., capitalized at $10,000, for manufacturing hardware.

The Midland Metal Works, Philadelphia, have incorporated as the Midland Metal Co. Their line of goods includes brass, bronze and copper goods and architectural iron working.

C. A. Wade, B. D. Stout, J. L. Stout and W. L. Virgin are among the incorporators of the Parkersburg Mantel Tile & Manufacturing Co., Parkersburg, W. Va., capitalized at $25,000 for manufacturing mantels, grates, etc.

Fred Kraebel, Geo. W. Pfohl and Robt. F. Kreinheder are the incorporators of the Empire Form & Iron Co., Buffalo, N. Y., capitalized at $5,000 for manufacturing steel and iron.

John R. Corb, John B. Stansley and Ernest Sharp are among the incorporators of the Maryland Stamping Co., Baltimore, Md., capitalized at $100,000 for the manufacture of metal wares.

The Eclipse Mfg. Co., Milesgrove, Pa., send us a handsome wall calendar for the ensuing year. This shows a reduced oval of C. A. Lenoir's handsome picture, entitled "In Dreamland."

Reinhold Tiesler, Ferdinand P. Laclerq and Eugene E. Schmitt are the incorporators of the St. Louis Wire & Iron Co., St. Louis, Mo., capitalized at $7,000 for manufacturing wire and iron goods.

E. S. Van Loon, E. C. Stephens and W. G. Van Loon are the incorporators of the Van Loon Plumbing & Heating Co., Albany, N. Y., capitalized at $25,000, for doing a general hardware business.

The Charles Rosenheim Co. are a new Louisville, Ky., concern capitalized at $100,000 for manufacturing and dealing in cutlery. Charles Rosenheim, Jacob Rosenheim and Moses Strauss are the incorporators.

Levi Davis, Chas. A. Cannell, Wm. Sontag, Henry E. Busse and David A. Wyckoff are the incorporators of the Hutchins Roller Swing Co., Alton, Ill., capitalized at $50,000 for the manufacture of the Hutchins roller swing.

J. C. Scott, N. M. Crossley, Bourbon Bowles, Blanche Crossley and J. A. Scott are the incorporators of the Scott & Crossley Hardware Co., Petaluma, Cal., capitalized at $75,000, $43,000 of which has already been subscribed.

Jerry G. Hoffken, George Stewart, Granville F. Prescott and William Furst are the incorporators of the North Star Mfg. Co., Minneapolis, Minn., capitalized at $20,000, for the manufacture of gas and gasolene engines.

The Jones Hardware Co., Richmond, Ind., claim the retail record for selling wire fence for 1903, as during that time they sold 86 carloads, or 215,000 rods, of fence. Their new warehouse is being pushed to completion and will be ready by Feb. 1st.

The Blish, Mize & Silliman Hardware Co., Atchison, Kans., will be represented on the road during the coming year by R. V. Hellener, L. A. Davis, E. M. Davis, R. S. Hughes, Charles E. Wheeler and Frank J. Gould, C. E. Filley, Joe Ayres and D. E. Birch.

Llewellyn H. Vinnedge, office manager of the Anderson, Ind., branch of the American Steel & Wire Co., has, it is said, been absent for the past week and F. A. Mower of the general office of this company has been placed in charge of this branch by Treasurer F. L. Watson of Chicago.

The Smith & Hemenway Co., 296 Broadway, New York, have been experiencing a gratifying growth in their Canadian business and have found it necessary to open an office and sample room at Suite 215, Coristine building, Montreal, where the Canadian dealers

will be supplied with quotations on "Green Book" goods.

Ira A. Flood, Clay Center, Kans., for a number of years a traveling salesman for the Blish, Mize & Silliman Hardware Co., of Atchison, Kans., received a munificent Christmas present, as he drew a $10,000 prize in a Mexican lottery, and received the money on the evening when Kris Kringle's reindeers are supposed to gallop over the roofs.

P. H. Donovan of Hartland, Minn., is succeeded by the Hartland Hardware Co. The new company are capitalized for $10,000 with $4,500 paid up capital. They will handle hardware, stoves and buggies. The officers and directors of the company are: H. L. Chaffee, president; Theo. Grove, secretary, and Arthur W. Jackson, treasurer.

Geissler & White of Elysian, Minn., are succeeded by The Elysian Hardware Co. They will handle hardware and buggies, making a specialty of builders' hardware, furnace and tin work. They are capitalized for $10,000, with $5,000 paid up. The stockholders are H. L. Chaffee, Jas. A. Geissler, Sr., and Jas. A. Geissler, Jr., and S. T. Austin.

We acknowledge our indebtedness to H. G. Cormick, Centralia, Ill., ex-president of the National Retail Hardware Dealers' Association, for a very handsome 1904 calendar. This shows a beautiful blonde in opera costume, and is tastefully set off with a blue background. The customers of Mr. Cormick are to be felicitated on their opportunity to secure so pretty a calendar.

On Jan. 5 the Judiciary Committee of the Chicago City Council placed on file Mayor Harrison's ordinance providing for the licensing of hardware dealers who sell revolvers and guns. Happily there is practically no chance of this vicious and unnecessary piece of legislation becoming a law as the majority of the Judiciary Committee are opposed to its passage, and it is certain to be pigeon-holed and left to gather a fitting coat of cobwebs and dust.

The Philadelphia Lawn Mower Co., 3101-3107 Chestnut street, Philadelphia, are manufacturers of a complete line of lawn mowers. Their Golf mower, with 8 blades, 10-inch wheels, 7½-inch cylinders, train of three gears and double ratchet, is constructed for a very close and even cut. The knife bar is set close to the ground on the right angle for this purpose. The eight blades, with two on bed knife at once, makes it run a little harder, but they insure a fine, even cut.

The January number of *Graphite*, the publication of the Joseph Dixon Crucible Co., Jersey City, N. J., states that the cost of a first-class lead pencil lies upon the time and labor spent upon the so-called "lead." In order that the lead should be of perfect smoothness and fineness, free from grit, the graphite is most carefully floated through water for a number of times and then filtered and mixed with clay which has also been subjected to thorough and careful treatment.

The Lyman Wood Manufacturing Company, Racine Junction, Wis., send us a little circular calling attention to their Belle City fire backs. Their No. 4 fire back is for coal cook stoves. It adjusts from 11¾ to 18 inches in length and from 4½ to 6½ inches in width. It weighs 12 pounds; the main part is ½ inch thick, and there are no bolts coming through to face of back to burn off. The back adjusts in length by sliding plates at each end, and breaks off to adjust in width. The castings are grooved on each side so that they break off perfectly easily and straight.

The Waterloo (Ia.) Courier of Jan. 1 contains a write-up of the Cutler Hardware Co. of that city, which states that this store has the honor of being the oldest in Waterloo, as F. E. Cutler, the president, is the oldest business man in point of continuous service in East Waterloo. His hardware store was established in 1866 and the Cutler Hardware Co. was incorporated in 1891. The wholesaling branch of this business was begun in 1885 and retailing and wholesaling were carried on hand in hand until 1897, when the retail department was closed down. This firm employ men, seven of whom are traveling salesmen. Their volume of business during 1903 was the greatest in their history.

The Avery Stamping Co., Cleveland, O., send us a circular calling attention to some of the features of their smooth back shovels. In these goods the socket is shaped from the same piece of metal which forms the blade. Just as flanging adds to the strength of a flat sheet, so does the manner of making the socket of these patented smooth back shovels give strength which otherwise is impossible to equal, it is claimed. The smooth back consists of a steel plate (of the same thickness as the blade), welded on and extending up beneath the steel shank of the shovel. No wood whatever is visible along the shank of these shovels. The wearing of the back does not affect the utility of the patented smooth back shovels. The socket is ever as strong and will bear as large loads as ever on the shovel blade. Other goods made by this firm include spiders, griddles, kettles, scotch bowls, stew pans, stew pots, garden trowels, post hole diggers, washers, felloe plates, etc.

NEW OFFICERS FOR CHICAGO JOBBING HOUSE.

At the annual meeting of the stockholders of Hibbard, Spencer, Bartlett & Co., Chicago, held recently, the following officers were elected for the ensuing year: President, A. C. Bartlett vice presidents, Chas. H. Conover, Wm. G. Hibbard, J. J. Charles, Frank Hibbard; secretary, A. M. Graves; treasurer, E. G. Clark; assistant secretary, C. B. Whipple; assistant treasurer, H. J. Sawe; credit manager, F. L. Macomber. Most of these officers have been promoted owing to the death of Wm. G. Hibbard in October last. Mr. Bartlett, the new president, was formerly first vice president, and Mr. Conover, the new first vice president, was formerly secretary, while the secretary, A. M. Graves, assistant secretary C. B. Whipple, assistant treasurer H. J. Sawe, third vice-president J. J. Charles and fourth vice-president Frank Hibbard were formerly directors. E. G. Clark, now secretary of the company, was formerly cashier. Wm. A. Sickles was also elected as a director of this company.

ATLANTA HOTELS GIVE REDUCED RATES.

The Southern Hardware Jobbers' Association will meet at Atlanta, Ga., May 24-27 next.

The American Hardware Manufacturers' Association will meet at Atlanta, Ga., May 24-27 next, making their headquarters at the Kimball House, that city, and will hold their session in the spacious convention hall in that hostelry.

Both the Kimball House and the Piedmont Hotel of that city are making special rates for delegates.

The Kimball House advises us as follows concerning its reduced prices during the convention:

"Our rates will range as follows:

Single, American plan	$2.50 to $4.00
Single, European plan	1.50 to 3.00
Double, American plan	2.00 to 3.50
Double, European plan	1.00 to 2.50

"The last named rates being rooms with private baths. The reservations will be made as the orders are received. It will be the policy of the hotel to give the attending members the very best accommodations in the hotel."

The Piedmont Hotel will make rates as follows during the convention:

European plan, $1.50, $2.00, $2.50, $3.00, $3.50 per day, each person.

American plan, $3.00, $3.50, $4.00, $4.50, $5.00 per day, each person.

On the American plan, where two persons occupy the same room and one bed a reduction of 50 cents per day for each person will be made from the above rates. On the European plan, where two persons occupy the same room, and one bed, an additional charge for the second person will be made of $1.00 per day for room without bath, and $1.50 with bath. Engagements of rooms will be made in the order in which they are received, and every effort will be made to give such rooms and at such prices as are applied for.

PREPARING FOR ILLINOIS MEETING.

The meeting of the Illinois Retail Hardware Dealers' Association which will be held in East St. Louis, Feb. 23 and 24, will undoubtedly be the most successful in the history of this flourishing association. A local committee consisting of Fred B. Giessing, Charles Mauer, J. W. Gillespy, Wm. Hauss and F. B. Jordan are making active preparations to make the affair as successful as possible. The Music Hall in that city has been selected as the meeting place of the association, and the Royal Hotel will be the headquarters. The committee expect that 500 retailers will be in attendance.

AN ATTRACTIVE PROGRAM IS BEING ARRANGED.

The Minnesota Retail Hardware Dealers' Association are already making active preparations for their eighth annual convention, which will be held at Elk's Hall, St. Paul, Feb. 24, 25 and 26 next. The Commercial Club will entertain the visiting dealers on the evening of Feb. 25. A number of papers will be read by experienced hardware men on the best methods of advertising, on conducting a hardware store, buying, selling, etc. M. L. Corey, Argos, Ind., secretary of the National Retail Hardware Dealers' Association, and ex-Senator A. T. Stebbings, Rochester, Minn., the treasurer of the National Hardware Association, will deliver addresses. The Parcels Post bill, which has been pending in Congress for several years, will also be thoroughly discussed.

MISSOURI DEALERS WILL MEET.

The Executive Committee of the Missouri Retail Stove & Hardware Dealers' Association have decided definitely on the date of their forthcoming annual meeting which will be held at St. Louis, as Secretary Frederick Neudorff advises us in a recent favor however, that all members of this committee favor meeting on Feb. 23 and 24, as it is their unanimous desire to meet jointly with the members of the Illinois Retail Hardware Dealers' Association,

HARDWARE MEN WILL MEET.

The Implement & Hardware Dealers' Association of Montana will meet at Helena, Feb. 8. This association, while young in years, has been very prosperous.

SOUTHERN HARDWARE JOBBERS CONDITIONS.

C. B. Carter, Secretary of the Southern Hardware Jobbers' Association, in an article on "The Growth of the Wholesale Hardware Trade in the South in the Past Twenty-five Years" in the January 1st issue of the Chattanooga Tradesman, says:

"As the years passed by, the hardware jobbers gradually increased their lines, adding such departments as were allied to their principal lines, and upon which a fair margin of profit could be realized. Yankee ingenuity has done much to increase the hardware jobbers' business. Patents galore have been granted on articles closely related to hardware lines, and the manufacturers who handle the same quickly interest the jobbers, and they in turn must employ more travelers to cultivate the retail trade and to some extent educate the consumers to the use of some special articles.

"The introduction of catalogues has done much to increase the jobbers' business. The traveling man cannot go through the entire line of the jobber he represents on each visit to each retail customer. Neither the salesman nor the customer has the time—in fact, it is not necessary. Again, it is seldom that a retailer will remember the various specialties—or even the different lines—handled by a jobber, and certainly very few can remember the description and cost prices. The retailer is continually having calls for articles he does not handle, and the prospective customer can get little satisfaction from a haphazard description of the article in question and an approximate cost. Since the introduction of the catalogue conditions have materially changed. The retailer refers to the jobbers' catalogues and quickly finds just what is wanted, together with description and price. The customer is satisfied, and orders the article at once. In the aggregate, these special orders amount to considerable volume, and in

addition the retailer can replenish and even increase his line by a liberal use of the catalogue.

"Another important factor in the growth and development of the southern wholesale hardware trade is the introduction of new and improved methods in the conduct of business. Also to the more harmonious relationship brought about between the manufacturers and jobbers. These results can be traced to trade organizations.

"It seems hard to believe that association work has brought about the present results, but such is the fact.

"Hardware jobbers from all sections are now bound together in close ties of friendship. They meet together frequently and correspond freely, exchanging ideas and methods on the most profitable and economic plan of conducting their business. The manufacturers are also invited to their conferences, and they, too, become acquainted each with the other, and all work in harmony for the accomplishment of such plans as will work for the good of the greatest number and to the further upbuilding of the wholesale hardware trade in general, and co-operating especially with southern merchants for their best interests."

PUBLICITY AND PROGRESS.

We all laugh at the boy who went to market with a sack of potatoes and did not sell any, as he kept them in the sack and to the only man who asked what he had in his sack he replied, "None of your business." However, many of us fail to grasp the close relationship existing between publicity and success. The goods that are seen are the goods that are bought. A dealer may have the finest stock in the world, but no one will know it if he keeps it in original packages in the corner of the cellar. That publicity essential to success is given by the shelving sold by the Warren Mfg. Co., Masonic Temple, Chicago. This shelving gives a certain prestige to a store with its elegant finsh, which is not after all so ruinously expensive. It systematizes the arrangement of goods and makes them look their best. People buy what they see, as we said before, and it should be borne in mind that many people in this country have an imperfect knowledge of our language and perhaps do not know the English word to describe what they desire, and embarrassment in filling their wants is avoided when goods are plainly shown. The trade should write this firm for some of their colored circulars. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

STAR SHOVELS, SPADES AND SCOOPS.

The Star Shovel and Range Co., Vincennes, Ind., send us a catalogue showing their line of shovels, spades and scoops. This volume embraces some new ideas, among which is the illustration of goods on one page and their description on the opposite page. An arrangement for ordering goods by code has also been inserted.

The goods shown include plain back or Antrim weld shovels with square and round points, plain back or Antrim weld spades, also Antrim weld ditch, drain and post spades, Antrim weld molders' shovels, hollow back or Cleveland pattern shovels, square point and round point Cleveland patent spades, coal shovels, ore and special lipped railroad shovels, Cleveland pattern wide mouth or western scoops, Cleveland pattern narrow mouth or eastern scoops, Cleveland pattern charging scoops, Cleveland pattern furnace or house scoops. This firm's patent quick repair handles are made in three parts, the two wooden sections being reinforced with a solid planished steel ferrule.

One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

BANQUET TO EMPLOYES.

The Whiton Hardware Co., Seattle, Wash., tendered a banquet to its employes on January 1 at Hotel Washington.

The following persons were in attendance: Mr. C. W. J. Reckers, Mr. John F. Welborn, Mr. John Reckers, Mr. Fred Martine, Mr. C. F. McNealy, Mr. Frank B. Collins, Mr. Lloyd Martine, Mr. Guy Dickie, Mr. Louis Cragin, Mr. Tracy James, Mr. William McPhee, Mr. L. J. Cruttenden, Mr. Arthur Sherrick, Mr. Chester Klieves.

SUPERIOR SHOOTING.

At Glen Rock, Pa., Dec. 29th, the York County live bird championship was won by C. E. Humer, who scored 24 out of 25 from the 30-yard mark. Mr. Humer used Peters' Ideal factory loaded shells and Schultze Powder. Mr. Humer also won high amateur average for the day at targets, scoring over 90 per cent, using Peters' Premier shells, loaded with Ballistite. At York, Pa., Dec. 17th, high average was won by Hood Waters of Baltimore. He used Peters' Premier shells, loaded with L. & R. Infallible. These shells are manufactured by the Peters Cartridge Co., Cincinnati, O.

SOME TIPS FROM A SUCCESSFUL JOBBER.

R. A. Kirk, president of Farwell, Ozmun, Kirk & Co., St. Paul, Minn., leading hardware jobbers, and ex-president of the National Hardware Association, gave the following valuable tips concerning success in his recent address at the banquet given by this house to their employes:

"In referring to the qualifications of successful salesmen the speaker called attention to the ideal which it is necessary to keep constantly before one if success is to be attained. The successful salesman is absolutely honest at all times, to his house, to himself and to his customers. It is a poor salesman who will take advantage of customers in any way. Absolute truthfulness should be the rule in regard to goods and prices, while at all times there should be as well the constant idea of furthering the interests of the house. The good salesman will consult the best interests of the customer in the amount and variety of stock sold. It is not a benefit to his house to sell a customer goods which cannot be handled in the locality, nor will the good salesman overload customers with more stock than can be absorbed by the demands of their trade.

"The rules for success laid down by a prominent manufacturer were quoted as a good guide for ambitious salesmen. One of these is diligence, on which the speaker dwelt at some length. Constant and devoted work was a necessity to produce good results.

"The young man who keeps his eyes on the clock in anticipation of closing time and hurries out at the exact minute will never be the head of his house. This rule applies to the men on the road as well.

"To succeed, a man must have a love for his business. He must think it in some respects the best business on earth and must carry his enthusiasm into his every-day work.

"Another rule that should be followed by every salesman is to learn all about his competitors' business. It is not enough in these days of keen competition to confine oneself entirely to one's own business. Methods of competition should be given careful attention. Salesmen should be thoroughly familiar with goods sold by other houses, with their merits and demerits, and with their prices. In no other way can they advance so quickly the sale of the goods put out by their own house.

"In the line of diligence, the speaker called attention to the failure on the part of some salesmen in this respect. He would not say salesmen of their house, but salesmen in general. Some had an idea that the more towns they could cover the better work they were doing. This is not by any means the case. Too much time is often spent on the road, to the detriment of the order book. Towns should be worked thoroughly and all the business secured that is to be had."

RESOLUTIONS ON DEATH OF G. GUTHAUS.

Wm. Gormley, H. E. Gnadt and W. H. Bennett, a committee appointed by the Chicago Retail Hardware Association to prepare a memorial on the death of Gustav Guthaus, submitted the following resolutions at the annual meeting of the association held Dec. 30th last:

Whereas, It has been the Divine will of Providence, to remove from our midst, our fellow member, Mr. Gustav Guthaus, be it

Resolved, That in his death this association has lost one of its sterling, honest and conscientious members, his partners a hard working helpmate, and his family a fond and loving husband and father; be it further

Resolved, That we in meeting assembled do hereby extend our utmost sympathy to the family and the business partners of our deceased fellow member, in this their great loss; be it further

Resolved, That a page be set aside in our records to the memory of our late brother member and that a copy of these resolutions be sent to the widow and another to the firm of Guthaus Bros. & Matthews.

DEMAND AN INVESTIGATION.

The Chicago Retail Hardware Dealers' Association have passed the following resolutions demanding a thorough investigation of the causes of the recent fire in the Iroquois theater, Chicago:

Whereas, The fatal catastrophe at the Iroquois Theater arouses every human sympathy for the bereaved and suffering, and,

Whereas, Every sense of self-preservation, as well as the proper protection of our families and fellow beings against the recurrence of such a disaster, calls for a unanimous protest against the conditions responsible for such results, be it

Resolved, That we extend our deepest sympathies to the bereaved families and their friends and to the individuals suffering from injuries received in this terrible disaster.

Resolved, That we severely condemn the toleration and licensing of theater buildings so seemingly inadequate and faulty in exit arrangements as to cause such a calamity, and that we deplore and condemn the seeming criminal negligence in organization and training of attaches which too often exposes an innocent public to the danger of such an appalling horror.

Resolved, That we give our moral support and encouragement toward a proper investigation of this disaster and insist upon the elimination without fear and favor of like dangers presented in the construction of all theaters.

BUSINESS CHANGES.

NEW FIRMS.

Chicago, Ill.—W. V. D. Wright Co.

Columbus, Ga.—The William Beach Hardware Co.

Denver, Colo.—Edgar Wood and Clyde Moore.

Des Moines, Ia.—The Stark Hardware Co.

Evansville, Ind.—The Evansville Implement & Farmers' Supply Co.

Fort Smith, Ark.—The Webber-Ayres Hardware Co.

Lakefield, Minn.—M. J. Evans.

Mayfield, Ky.—Carter Hardware Co.

Sturgeon Bay, Wis.—Halstead-Maples Hardware Co.

Lyndon, Kans.—T. W. McGrath.

Juda, Wis.—R. B. Swan.

Massillon, Ohio—Wilson Hawk.

Hartford, Mich.—A. U. & L. E. Michael.

CHANGES.

Jewell, Ohio—C. W. Palmer is succeeded by Seiple & Owens.

Westfield, Ind.—A. H. Bradfield is succeeded by W. H. Bradfield.

Hindsville, Ark.—Dunaway & Stephens succeed J. H. Dunaway.

Horton, Kans.—C. M. Lambert & Co. are succeeded by Reichers & Son.

Carroll, Ia.—L. A. Andrus succeeds Charles Peters.

Saybrook, Ill.—The Spaulding hardware stock has been purchased by H. D. Stine and R. G. Lott.

St. John, Mich.—Jacobs & Hasse are succeeded by B. W. & I. E. Hewitt.

Davenport, Ia.—Hugo and Herman Rohlffs succeed P. & P. Federson.

Table Rock, Neb.—Kovanda & Carmichael have dissolved partnership.

Owendale, Mich.—Jones Bros. succeed S. P. Cope.

Harrisburg, Ill.—Chas. Ozment has purchased a half interest in the hardware store of A. J. Miller.

Cass City, Mich.—Jones & Hinkley succeed S. P. Cope.

Pipestone, Mich.—Gurley & Ober are succeeded by Younmeyer & Duea.

Los Angeles, Cal.—B. C. Dressler is succeeded by the Dressler Hardware Co.

Lewisville, Minn.—Thomas M. Lewis is succeeded by J. H. Plummer.

New Windsor, Ill.—P. E. Nicholas is succeeded by the Christy Hardware Co.

Lorimer, Ia.—Foster Bros. are succeeded by the Foster Hardware Co.

Marshall, Ill.—R. Mitchell & Co. are succeeded by James Robinson.

Greencastle, Mo.—L. P. Husted is succeeded by Husted & Megrew.

Menlo, Kans.—Stakebake & McVey succeed Ora McVey.

Evanston, Ill.—Lee Caldwell is succeeded by George Wallace.

Marva, Ill.—Ryland B. Shaw is succeeded by James E. Harris.

Mantua, Ohio—Fred Webber succeeds John Haas & Son.

Seymour, Ia.—H. C. Pederick has purchased an interest in the Seymour Hardware Co.

Hunt City, Ill.—O. H. Madden is succeeded by J. L. Hiles and F. Stamm.

MISCELLANEOUS.

Canton, S. D.—Sioux Valley Hardware Co. are contemplating going out of business.

Boyd, Minn.—A. J. Nelson is erecting a new store.

Washington, Ia.—The Geo. Stewart Hardware Co. are erecting a brick warehouse.

Washington, Ia.—Charles Labes & Son have moved into their new building.

Dexter, Minn.—M. D. Williams is selling out his stock, it is reported.

Heating and Ventilating

The Uniontown Acme Radiator Co., Uniontown, Pa., have established a jobbing foundry and are now making gray iron castings.

Etta Snyder, Charles H. Snyder and Elmer Chisholm are the incorporators of the Snyder Heater Co., Detroit, Mich., capitalized at $20,000.

The Monongahela Mfg. Co., Monongahela, Pa., have embarked in the manufacture of steel ventilators. These will be used principally in mines.

Albert Heard, Harry T. Baker, B. B. McWolf and others are the incorporators of the Moser Heating Co., Hagerstown, Md., capitalized at $6,000 for absorbing the business of the E. C. Moser Co.

V. H. Grossius, W. Grossius, F. W. Barry, Guy W. Mallon, N. J. Danahal and W. J. Foy are the incorporators of the J. M. Grossius Furnace Co., Cincinnati, Ohio, capitalized at $50,000 for the manufacture of furnaces.

Benj. W. Kinney, for the past ten years manager of the heating and ventilating department of the Boston branch of the Fuller-Warren Co., was victim of a fire which destroyed the house of the Troy Club, Troy, N. Y., on the morning of Dec. 30.

The Richardson-Morgan Co., who have been in the manufacture of furnaces in New York for a number of years, have incorporated their business with a capitalization of $35,000. M. A. Rourke, L. J. Waterbury and Ed. R. Harding are the incorporators.

Chas. W. O'Neil, F. A. Bracken and W. G. McRoberts are the incorporators of the Peoria Water Heater Mfg. Co., Peoria, Ill., incorporated with a capital stock of $25,000 for the purpose of manufacturing water heaters, urns and plumbers' supplies.

The Dugger-Clark Supply Co., 112-114 Dearborn street, Chicago, have been appointed the exclusive western sales agents for the Kennedy Valve Mfg. Co., the Pittsburg Valve & Fittings Co., the Federal Mfg. Co. and the Modern Iron Works. In connection with their other agencies, this gives them a very extensive and desirable line of steam and plumbing specialties.

The Lennox Mfg. Co., Marshalltown, Ia., manufacturers of the Torrid Zone furnace, have recently moved into a building which they will devote entirely to the manufacture of their popular furnaces. This building is 80x190 feet in size, two stories in height, a portion of which is devoted to the tin shop, which is 50x90 feet in dimensions. This company are employing about 50 men in their furnace department alone, and expect to sell over 2,000 furnaces the coming season.

The Pan-Coast Ventilator & Mfg. Co., Inc., 233 South Fifth street, Philadelphia, Pa., are well known as manufacturers of a line of superior ventilators. They have recently made an important addition to their magnificent line of goods in the Royal, on which they were allowed a patent on Dec. 11 last. This ventilator is absolutely stormproof, and while of a superior quality, is offered at a reduced price. They would be pleased to furnish dealers with price list and discounts. When writing them kindly add: "Saw it in THE AMERICAN ARTISAN."

The Kelsey Heating Co., 341 West Fayette street, Syracuse, N. Y., will be represented by the following corps of traveling salesmen for 1904: M. J. Kelsey, with headquarters at 570 State street, Springfield, Mass., will look after the interests of Kelsey generators in Massachusetts, Connecticut and Rhode Island; W. F. Foss, with headquarters at 19 School street, Augusta, Me., will act as their trade missionary in Maine, New Hampshire and Vermont; E. H. Bradley, with headquarters at 11 Martha street, Binghamton, N. Y., will have the Empire state north of Yonkers as his field; Harry W. Bradley, with headquarters at 321 Spring street, West Pittston, Pa., will have Pennsylvania, New Jersey, Delaware, Maryland, Virginia and the South; A. Hopkins, 105 Dewitt street, Buffalo, N. Y., will have Ohio, Michigan and Indiana; L. V. Sanford and L. Hurd Sanford, 156 Fifth avenue, New York, will cover New York and vicinity. Cook & Van Evera, 38 East Lake street Chicago, Ill., will act as selling agents for Illinois, Wisconsin, Minnesota, Iowa, Nebraska and North and South Dakota.

WILL RANGE BOILER OPERATE?

TO THE AMERICAN ARTISAN.

Will a hot-water plant operate with the range boiler in the basement and range with water front on first floor nearly directly overhead about 8 or 10 feet from boiler? "READER."

———, Wis., Jan. 2, 1904.

U. S. CLINKER HOOK.

The United States Wire Mat Co., Decatur, Ill., are manufacturers of the U. S. clinker hook, illustrated herewith.

This hook is advertised in Munsey's, McClures,

Removing Clinkers with Shovel and Poker.

Everybody's, Collier's, Saturday Evening Post, and the Philistine. These advertisements all urge consumers to ask the dealer for these hooks and thus aid in making sales.

The United States clinker hook is made of wrought steel throughout, with the exception of wooden handle grips, and will not lose its shape on account of heat.

The U. S. Clinker Hook at Work.

The three prongs comprising its mouth are opened wide or shut tightly around the clinker simply by turning the right handle grip, which is the upper end of the inner shaft, the third prong being the lower end of same. The prongs are sharp and never allow the

The U. S. Clinker Hook.

clinker to slip until it is released by the hand again opening them.

This hook saves coal, as a turn of the wrist closes it tight around the clinker, which is lifted out without the least trouble, neither hands nor sleeves touching the furnace door.

ARE MAKING IMPORTANT CHANGES.

The Auer Register Co., Toledo, Ohio, are sending a handsome card to the trade wishing them a Merry Christmas and a Happy and Prosperous New Year. They also make some very important announcements to the trade. They have made several important improvements and additions to their line of side wall registers, including a number of new sizes and new designs, which will place them in a better position than ever to meet the demands of the trade for the ensuing year. They, however, still make registers with original cast boxes. This firm have acquired the patterns and business of the Toledo Furnace Company, and to their already large variety have added new patterns, making in all a most complete and desirable line of powerful heaters. They have also brought out an entirely new and up-to-date line of steel ranges under the name "Radium," which embody the latest improvements in this line. They would be pleased to have the trade write them for catalogues and prices.

AN UP-TO-DATE SLATE FIRM.

The Auld & Conger Co., Cleveland, Ohio, send us their January 1, 1904, price list. This firm are manufacturers of No. 1 Bangor Union, No. 1 and No. 2 Bangor Ribbon, No. 2 Bangor, Bangor Hard Beds, Mammoth Vein Poultney Sea Green, Purple Vein, Unfading Green and Pennsylvania Black slates. They are dealers in Peach Bottom, Maine Red, Albion Bangor, Intermediate Sea Green roofing slate, slaters' supplies, etc. Their "Mammoth Vein" quarries at Poultney, Vt., have every appliance that modern invention has produced and consequently, they are able to manufacture a slate of a uniform quality in almost unlimited quantities. Their stock is strong, tough, and of a good metal and color, and is an ideal roofing material for mills, barns, factories, warehouses and medium-priced dwellings. For the purpose of filling orders promptly, this firm have constructed an overhead tramway two miles long, by which all their sea green and purple slates are brought down to their storing and loading sheds as soon as made. This protects their slate from freezing together in winter, and enables them to load cars with superior promptness.

Their Purple Vein slate is about the same stock as the Sea Green but has a nicer and more durable color. Their certificate, properly filled out and signed by the inspector of the Bangor Roofing Slate Manufacturers' Association, accompanies each invoice this firm send out of Genuine Bangor No. 1 slate and No. 1 Ribbon slate.

Besides their line of slates, this firm handle the Bangor slate black boards, which are fine in quality, smooth in texture, free from flints, etc., hand shaved and rubbed. They are made in 3-foot, 3½-foot, 4-foot and 4½-foot widths. Their slate grave vaults are made in all lengths and styles. Their line of slaters' felt is guaranteed to be full measure, 500 square feet to the roll.

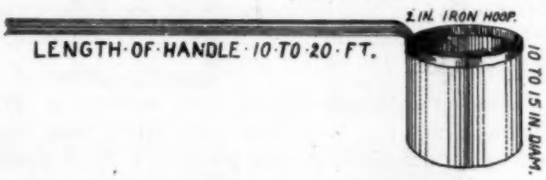
Other of their goods are snow guards, slaters' cement, slating nails, ridge roll, structural slate, Lightning slate dressers, slaters' hammers, slaters' stakes, and slaters' rippers. Their Lightning slate dressers are made of iron and steel and are very strong and durable. They are adjustable to any size and shape; cut and punch at the same operation; countersink the hole and cut round or straight. The punches make a hole looking very much as if they had been drilled or countersunk—there is no scaling off.

Tinshop

CISTERN CLEANER.

TO THE AMERICAN ARTISAN.

I send illustration of a cistern cleaner for cleaning cisterns without pumping out the water. It is made of two-inch hoop iron bent into a ten or fifteen inch circle with six-inch straps for fastening to handle. One side of the circular rim is sharp and the other is punched full of holes, say about one inch apart. Sew to this rim a sack about fifteen inches deep, made preferably



of gunny cloth (coffee sack) wide enough to fit the rim nice. Sew sack to rim with malleable wire.

This is the best known cleaner, as it has a good edge for scraping up the dirt while the sack allows escape of surplus water. The sack must be sewn inside, or in such a manner so as to protect from wear near the hoop circle. John S. Jenkins.

Muncie, Ind., Dec. 24, 1903.

ROOF SADDLES.

TO THE AMERICAN ARTISAN.

Will some of the craft give us some information concerning the cutting of roof saddles for the top of roof, different pitches, and also for the sides of roof?

E. A. STEPHENSON HARDWARE CO.

Lowell, Ia., Jan. 6, 1904.

FORMAL ANNOUNCEMENT OF CHANGE.

The American Sheet Steel Co and the American Tin Plate Co. are sending the following notice to the trade under cover of Dec. 31, 1903:

The business of the American Sheet Steel Company and American Tin Plate Company will hereafter be conducted under the name of American Sheet & Tin Plate Company, with the following organization: George G. McMurtry, chairman of the board of directors; W. T. Graham, president; W. M. Leeds, first vice-president; E. W. Pargny, second vice-president and manager of sales; W. P. Beaver, assistant to president; John Warner, assistant to first vice-president; Howard M. Davis, assistant manager of sales; H. B. Wheeler, secretary and treasurer; H. L. Austin, auditor; G. M. McGinnis, assistant auditor; C. W. Bray, chief engineer, Pittsburgh; R. A. McKinney, purchasing agent, Pittsburgh.

The general offices of the company will be moved from Battery Park Building, New York, to Pittsburgh, early in 1904; but until further notice officers as above can be addressed at New York, with the exception of Mr. Bray and Mr. McKinney.

The following district sales agents have been appointed: Frank Dickerson, Battery Park Building, New York; W. H. Eaton, Marquette Building, Chicago, Ill.; W. J. Wetstein, St. Louis, Mo.; I. B. Williams, San Francisco, Cal.; Richard R. Hoge, Portland, Ore.; E. W. Sparhawk, Denver, Colo.; J. R. Scott, New Orleans, La.; W. T. Shannon, Cincinnati, Ohio.

The Detroit sales office has been discontinued. The Pittsburgh sales office will be merged with the general sales office when the offices are moved.

PRIZE COMPETITION.

The Niagara Machine & Tool Works, Buffalo, N. Y., manufacturers of machines and tools for sheet metal workers, have constantly striven to build new and improved tools for tinsmiths and other sheet metal workers, such as are demanded by altered conditions, and the cordial reception accorded their up-to-date tools attests their conspicuous success in this direction. Realizing that the users of tools know best what their desires are, this firm are offering six prizes for the best suggestions of new tools that will be useful in the shops of sheet metal workers or desirable improvements on existing tools. These prizes are: 1st, $50 cash; 2nd, one 30-inch Excelsior squaring shears; 3rd, one 30-inch Keystone bar folder; 4th, one No. 2 Waugh's circle shears; 5th and 6th, six medium sized Buffalo or Niagara snips.

It is not necessary that participants in the competition should construct the tools or improvements that they suggest, as clear explanation of their object will entitle them to consideration.

Communications will be received until April 30th, 1904, and the prizes will be awarded on May 1st, 1904, by a committee consisting of the superintendent of the works and two practical tinsmiths.

Names of the prize winners will be published in the columns of THE AMERICAN ARTISAN about June 1st, 1904.

NOTES AND QUERIES.

UNIVERSAL PORTLAND CEMENT.

From Gust Wenzel, Merrill, Wis.

Where can I buy the Universal Portland cement?

Ans.—The Illinois Steel Co., Chicago.

TINNING COPPER.

From Johnson & Roland, Richmond, Ind.

How do you tin copper?

Ans.—Prepare a bath from pulverized tartar, 3.52 ozs.; protochloride of tin, 14.11 drachms; water, 10 quarts; and, after heating the bath to boiling, immerse the objects to be tinned (pins, hooks, handles, eyes, etc.) in a tin sieve or in contact with a piece of zinc; frequent stirring with a tin rod shortens the process. Another method, given by Bottger, gives good results. Dissolve oxide of tin by boiling with potash lye, and place the copper or brass objects in the boiling solution in contact with tin shavings. Elsner's bath yields equally good results. It consists of a solution of equal parts of tin salt and common salt in rain water. The manipulation is the same as given above.

TINNING KETTLES.

From Johnson & Roland, Richmond, Ind.

How do you tin kettles?

Ans.—The kettle to be tinned is first freed from oxide, etc. It is then coated with a 10 per cent solution of chloride of tin, to which as much purified tartar as

will lay on the point of a knife has been added. Now rub thoroughly the moistened places with coarse zinc powder, obtained by pulverizing zinc just congealed. This process may be used for brass, cast and wrought iron and also for steel. The tinning, to be sure, is thin, but it adheres firmly, and a thicker coat can be obtained by repeating the process after a few minutes. Finally the kettle is rinsed off and polished in the usual manner, for instance with whiting.

TINNING COPPER.

From Johnson & Roland, Richmond, Ind.

Where can we get copper tinned?

Ans.—The Avery Stamping Co., Cleveland, O.; the Buffalo Galvanizing & Tinning Works, Buffalo, N. Y., and the Dover Stamping & Mfg. Co., Cambridge, Mass.

MOORE, SCHROEDER AND SENSIBLE STORM SASH FASTENERS.

From Richard Ellingson, Radcliffe, Iowa.

Who are the manufacturers of the Moore, Schroeder and Sensible storm sash fasteners?

(Can any of our readers answer this question?—Ed.)

NICKEL PLATED FAUCETS ¾ TO 1 INCH IN SIZE.

From Reader, Butte, Mont.

Where can I secure nickel plated faucets ¾ to 1 inch in size?

Ans.—Bishop & Babcock Co., St. Paul, Minn.; Hugo Cahn & Co., 67 Murray St., New York; Chas. Ehlerman Hop & Malt Co., St. Louis, Mo., and the Hoffman & Billings Mfg. Co., Milwaukee, Wis.

CAN MAKING MACHINERY.

From F. J. Blankertz, Brooklyn, N. Y.

Where can I buy can making machinery?

Ans.—Adriance Machine Works, Brooklyn, N. Y.; Blake & Johnson, Waterbury, Conn.; Chas. Leffler & Co., Brooklyn, N. Y.; Niagara Machine & Tool Works, Buffalo, N. Y.; Fred J. Swaine Co., St. Louis, Mo.; Torris Wold & Co., Chicago; G. A. Crosby & Co., 176 S. Clinton St., Chicago; E. M. Lang & Co., Portland, Me.; E. S. Stiles Press Co., Watertown, N. Y., and Ayars Machine Co., Salem, N. J.

BRASS CORNER PIECES FOR GRIP.

From W. W. Yokom, New Hartford, Ia.

Where can I have brass corner pieces of a special pattern made for a grip?

Ans.—Baldwin Brass Works, 232 S. Clinton St., Chicago.

ITEMS.

The United States Tin Co., capitalized at $1,000,000, are a new Tucson, Ariz., concern.

The Monessen, Pa., mills of the American Tin Plate Co., have started up giving employment to 800 men.

The Griffith Tin Plate Co., Washington, Pa., started operations on the first of the year with 200 men at work.

The La Belle plant of the American Tin Plate Co., located at Wheeling, W. Va., resumed operations on Jan. 4 last.

The Aetna Standard mill of the American Tin Plate & Sheet Co., Bridgeport, O., laid off all its salaried men on Dec. 29th last.

The Bethlehem & Easton Slag Roofing Co. are a new Easton, Pa., concern who will manufacture roofing material from furnace slag.

The McClure Co., Pittsburgh, Pa., manufacturers of tin plate, have reopened their Washington, Pa., plant with a force of 300 men.

The Shenango and Greer plants of the American Sheet & Tin Plate Co., New Castle, Pa., resumed operations on Jan. 4, with 2,500 men at work.

Horace F. Clark, William Prentiss and Fitzjames MacCarthy are the incorporators of the Pittsburgh-Alaskan Tin Company, Washington, D. C., capitalized at $5,000,000.

Hoffman & Mueller, sheet metal workers at 263 South Henry St., West Bay City, Mich., have dissolved partnership by mutual consent, A. F. Hoffman continuing the business.

Valentine Merz, A. G. Ricks, P. L. Volz, Victor Young, L. E. Valloft, Fred Becker and Joseph Harz will shortly incorporate a new New Orleans, La., concern, capitalized at $50,000, for the manufacture of tin cans.

Clendenin Bros., 111 South Gay street, Baltimore, Md., are sending a little card to their friends in the trade which reads: "Our Very Best Wishes for Your Good Health and Prosperity During the Coming Year."

Percy Donner, manager of the Monongahela mills of the American Tin Plate Co., has sent in his resignation to take place on Feb. 1, next. It is probable that he will organize a company to build an independent tin plate plant.

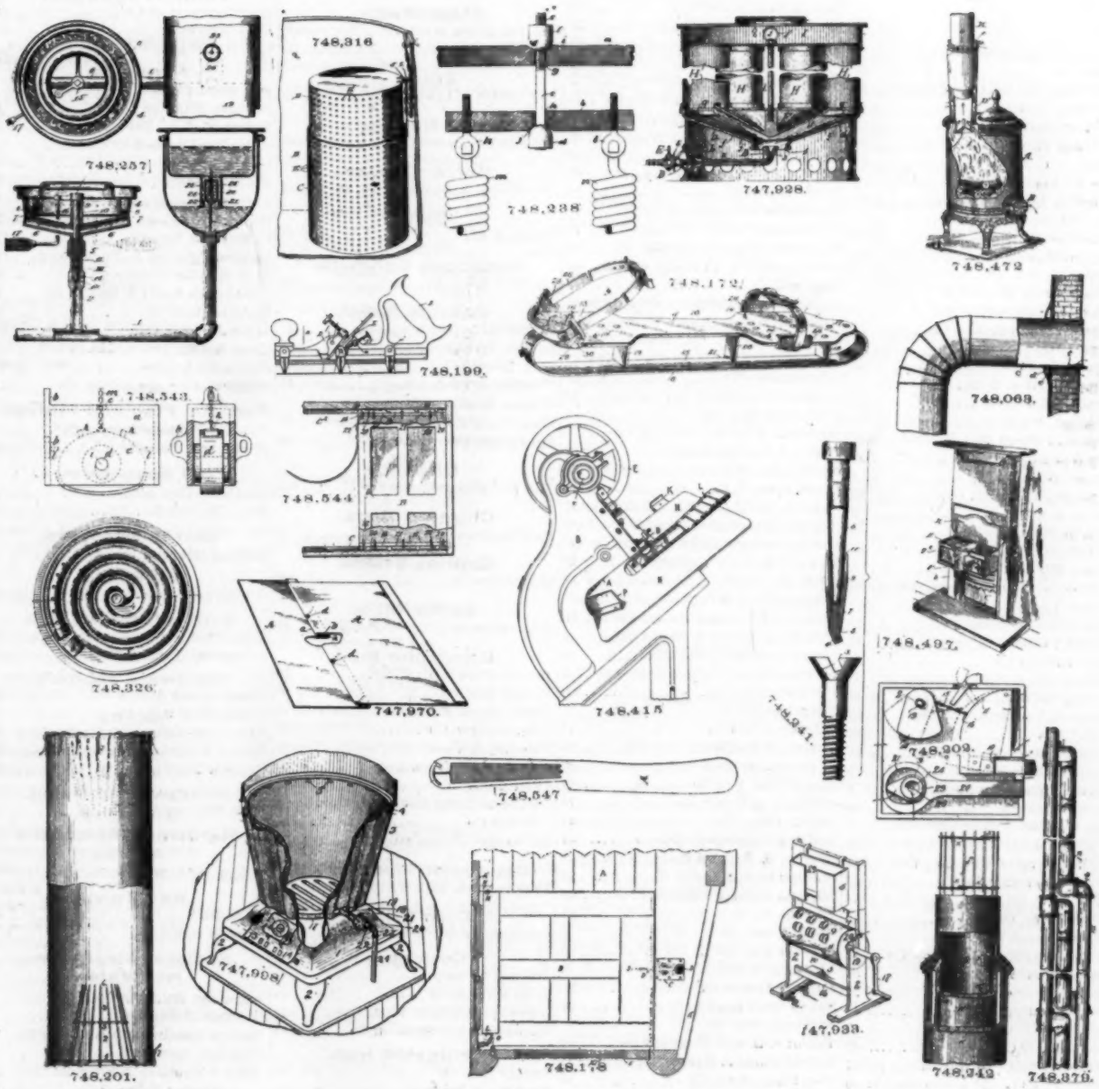
The Ford Roofing Co. are a new Greensboro, N. C., concern who will manufacture and deal in galvanized iron ware, stove pipes, stoves, sheet iron, copper, etc. They will also do a contracting business in tin, slate and gravel roofing.

W. C. Nimmo & Co., Baltimore, Md., dealers in roofers' supplies, send us a handsome wall card showing Holland scenes. This card is made in imitation of bas-relief cork work, and unless it is closely examined would be taken for the same.

Delbert E. Magee, for the past four years representative of the Germer Stove Co., Erie, Pa., in Indiana, Pennsylvania and western New York, has resigned and has accepted a position with the Elliott Mfg. Co., Warren, Ill., manufacturers of Elliott's patent anti-rusting tin ware. Mr. Magee will represent this Illinois firm in Ohio.

The Elliott Mfg. Co., Warren, Ill., gave a banquet to their traveling men at the Hotel Warren on Jan. 6 last. After a dainty menu, on which there was nothing naughtier than champagne jelly, had been discussed the following program was carried out: "Address of Welcome," by President W. F. Conyne; "Response," by F. L. Anderson; "Our Salesmen," by J. J. Walton; "The Printer," by P. T. Hicks; "Our Customers," by T. C. Shaw; "The Small Towns," by F. W. Hewitt; "The New Salesman," by L. H. Sawyer, and "What Would 'You' Say?" by P. W. McKibben.

NEW PATENTS.



747,928—Gas Heating Stove or Furnace. William S. Bechtold and Adolph Faber du Faur, Jr., Newark, N. J.

747,933—Vegetable-Cutter. George M. Burnett, Coney Island, N. Y.

747,970—Sheet-Metal Seam. Rollyn Hawkins, Indianapolis, Ind.

747,998—Convertible Stove. Charles R. Morgan, Akron, Ohio.

748,063—Stovepipe-Holder. Charles F. Goodman, Petersburg, Ill.

748,172—Skate. Arthur P. Draper, St. Louis, Mo.

748,178—Door-Opening Device. Oliver M. Edwards, Syracuse, N. Y.

748,199—Matching-Plane. Alexander Mason, Salem, Mass.

748,201—Animal-Trap. Benjamin F. D. Miller, Wooster, Ohio.

748,202—Lock. Joseph Mills, Marietta, Ohio.

748,238—Scale. Frederick Verflast, Boston, Mass.

748,241—Screw and Driver Therefor. Edwin L. Walter, Scranton, Pa.

748,242—Chimney. Carl Weber, Chicago, Ill.

748,257—Oil Burner. Edward Boekenkamp, St. Louis, Mo.

748,316—Inner Containing Vessel for Cooking Utensils. Arthur Siebelist, Philadelphia, Pa.

748,326—Air-Heating Device for Stoves, etc. Chas. E. Whitaker, Norwich, Conn.

748,379—Steam-Heater. William P. Hussey, Indianapolis, Ind.

748,415—Metal Cutting and Stamping Apparatus. James W. Paton, Liverpool, England.

748,472—Air-Feeding Apparatus for Stoves. Louis Brandt, Jr., and August F. Brandt, Spokane, Wash.

748,497—Fireplace. Arthur W. Hall, Hayneville, Ala.

748,543—Door-Stop. Albert A. Terry, Sydney, New South Wales, Australia.

748,544—Pocket-Ball-Bearing Door and Hanger Therefor. James K. Thoma, Cooperstown, N. Y.

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MINERALS IN CHINA.

A correspondent of the "Engineering and Mining Journal" points out that China may in a few years be in a position to ship enormous quantities of copper at less than half its present cost of production. China, independent of hundreds of miles of railways now in operation, in course of construction, and provided for, is covered by a complete network of rivers and canals, with a system perfected by centuries of use. The question of transportation would probably never act as a bar to the workings of any property. Labor is to be had in unlimited quantities, good and steady, at rates per month less than are usually paid per day in other countries. Coal of good quality is there in enormous quantities, with other requirements for mining and smelting, such as food supplies cheaper than in any other place where mining is now conducted. Within five years the working of a few antimony mines in the province of Hunan was commenced under government control, and, were it not for this control, the offerings from China would swamp the market; as it is, prices of refined antimony have been forced down over one-third and Chinese antimony ores are offered of good quality and at low prices. The mines are worked by hand labor, with crude tools, and no machinery is used. The ores, as brought to the surface, are sorted by women and children and are broken, where necessary, into small pieces, hand-culled and dressed. In this way the ore for export and for sale is practically pure. The rejected ores are smelted into crude antimony by a primitive method with great waste. The method is by volatilization, and the slags carry 25 to 30 per cent metal. Under these conditions, with over 1,000 miles inland transportation, Chinese are able to ship quantities of both ore and regulus at a satisfactory profit. These conditions will probably apply to the working by hand labor of many other minerals, especially if, under practical supervision of foreigners, modern tools and methods of mining are used. This would eliminate the risk of installing expensive machinery and plant until sufficient work had been done to determine sufficiently the extent and value of deposits. With low ocean freight rates to Europe and to New York per ton, maktrates, matte and metals, the future mining possibilities in China are great. The question of a "commercial yellow peril" to existing interests may be raised; on the other hand, there are opportunities for large profits. By way of comment, our contemporary remarks that it has long been partially known that China is rich in coal, iron and in the ores of many important metals, and the work now in progress seems likely to establish the truth, which has been heretofore only surmised.

Trade Report.

CHICAGO IRON MARKET.

The holiday season affected the iron market to a great extent and as a result the hand to mouth business of the past few months has not been broken. Consumers have been busy settling up old year's business, and the amount of business transacted during the holiday week is hardly of sufficient importance to chronicle either as to tonnage or prices.

Stock has commenced to run low in consequence, and this fact coupled with reassuring signs from the East should tend to produce better feeling.

The Southern situation is attracting some attention. Determined efforts are being made by the large furnace companies to fix and maintain prices based on $10.00 Birmingham for No. 2 Foundry. The appearance of this new element in the iron world has caused a little consternation among smaller dealers, but the effect has not been very pronounced as yet.

Whether or not this combination will be able to control prices will not be determinable until after the turn of the year. It has been predicted rather freely that the movement was rather inoportune.

On the whole the situation remains unchanged, except that there is more reason now than there was a month ago to expect a clearer atmosphere and considerably more buying in the near future.

IRON AND STEEL BARS.

The holiday season has played havoc with this line of business, as with all others, and the past few days have witnessed light tonnage. A marked improvement is looked for when the year gets a little older. Railroads have begun buying cars and orders for 1,500 have been placed within the past week. Prices are without change, and we quote bar iron, 1.30c to 1.35c Chicago, carload lots, mill shipments, half extras. Soft steel bars are 1.46½c, half extras, Chicago delivery, carload lots, mill shipments, with 5c to 10c extra for less than carload lots; angles, less than 3x3, 1.56½c base, half extras; hoops, 1.81½c carload lots, full extras. Jobbers' quotations on carload lots and less: Iron, 1.50c to 1.60c, base full extras; steel, 1.60c to 1.70c; small angles, channels and tees, less than 3x3, 1.70c to 1.80c; hoops, 2.10c rates, full extras.

BILLETS.

The market is dull and there is very little spirit shown. The carload price of open-hearth or Bessemer, for rolling or forging purposes, is $24 at Chicago.

SHEETS.

Store trade is brisk, but mill business has not improved. Keen competition and suicidal prices go on. We quote black sheets, carload lots, mill shipments: No. 27 gauge, 2.41½c to 2.46½c; No. 28, 2.46½c to 2.51½c; galvanized from mill 80 and 2½ per cent off. Store prices are without essential change, and we quote as follows: No. 16, 2.45c; Nos. 18 and 20, 2.55c; Nos. 22 and 24, 2.60c; No. 26, 2.70c; No. 27, 2.80c; No. 28, 2.90c; galvanized from store 75 and 7½ per cent.

PLATES.

Contracts aggregating 20,000 tons have been closed here during the week. The outlook is much clearer than a week ago. Mill shipments, Chicago delivery, are quoted as follows: Tank steel, ¼-inch and heavier, 1.76½c; flange steel, 1.86½c. From store, we quote on small lots: Tank steel, ¼-inch and heavier, 1.90c to 2c; 3-16, 2c to 2.10c; No. 8, 2.10c to 2.20c; No. 10, 2.15c to 2.35c; flange steel, 2.25c, all f. o. b. warehouse.

STRUCTURAL STEEL.

The building trade in this city presents a cheerful outlook. Several large jobs are being figured on and specifications on contracts are of pretty good proportions. Contracts have been closed for steel work on two local buildings, which will require about 4,000 tons of steel shapes. Prices are without change, and we quote mill shipments, Chicago delivery, as follows: Beams and channels, 16 inches and under, 1.76½c; 18 inches and over, 1.86½c; universal plates, 1.76½c; angles, 3x3 and larger, 1.76½c; tees, 3x3 and larger, 1.81½c; zees, 1.76½c. On lots from store, we quote beams, channels and angles, 3x3 and larger, 1.90c rates, 18, 20 and 24-inch, 10c extra; tees, 1.95c rates.

MERCHANT STEEL.

Contracts have been let out in fairly good proportions. Prices are without change, and we quote mill prices, Chicago delivery: Spring steel, 2c; sleigh shoe, flat sizes, 1.60c; concave and convex, 1.75c; cutter shoe, 2.25c to 2.30c; smooth finished machinery steel, 1.71½c base; plow steel, 2.50c and upwards, according to quality; toe calk, 2.01½c to 2.11½c. Ordinary grades of tool steel, 6c to 8c; specials, 12c and upwards. Cold rolled shafting in carload lots, 52, and in less than carload lots, 47 per cent discount from list.

RAILS AND TRACK SUPPLIES.

The demand for light sections is on the increase, if any change at all has been made in the situation. Heavy rails are quiet. We quote standard sections, 500 tons and over, $28; less than 500 tons to carload lots, $30; less than carload lots, $32; second quality rails, $27; 25-pound rails, $25 to $27; 12-pound rails, $26 to $28, with regular differentials for intermediate sizes. Track supplies, mill shipments, angle bars, 1.60c to 1.70c; spikes, first quality, 1.75c to 1.85c (out of store, 2.10c to 2.20c rates); second quality, 1.45c to 1.55c; track bolts, 3½x¾, with square nuts, 2.40c to 2.50c per 100 pounds (from store, 2.80c to 2.90c); with hexagon nuts, 2.55c to 2.65c (from store 3c), with usual differentials for other sizes.

NAILS.

New prices for nails have finally been made public by the American Steel Wire Company. The prices are too low, however, to be regarded as permanent and the general impression seems to be that they are held out as a kind of bait with which to start off the new year.

For car lots $2.15 is quoted as the base on wire nails and $2.45 on painted wire. Galvanized wire is $2.75. These marked reductions should tend to increase orders for these commodities considerably, and there is little doubt but what they will. The prices quoted are about 25 cents under those which prevailed just previous to the announcement and 35c under the opening of a year ago.

The cut in prices just about represents the difference in the cost of iron between now and a year ago. Nevertheless, there is too much watered stock on which dividends must be paid by the steel trust, and it is very doubtful if the public will derive much benefit from the reduction in iron.

SHEARS.

Sheep shears, No. B. B. A., regular grip, are now listed as follows: 6-in., $11.25; 6½-in., $11.50; 7-in., $12.00. Sheep, No. B. B. A., narrow grip: 6-in., $11.75; 6½-in., $12.00; 7-in., $13.00.

CASTERS.

Bed casters are now 60-10-5% off list; common plate, iron and porcelain wheel are 60-10-5% off list, and Philadelphia plate are 70-5% off list.

VISES.

Williamson Universal vises are now quoted at 20% off list.

COPPER.

Copper is firm and higher on the war news from the east. Lake is quoted at 12⅜@12¾c; electrolytic, 12⅜@12⅝c; casting, 12⅛@12⅜c. The London closing was cabled quiet: Standard copper, spot, £58 7s 6d; futures, £57 15s. The Copper Manufacturers' Association quotes manufactured copper on a basis of 18c per lb. for sheets and bars. Yellow sheathing material is quoted on a basis of 15c.

TIN.

The decline in London of £2 15s per ton was partly expected by those who have been watching the American consuming interests. These interests while dependent on imported pig tin cannot be forced to buy during what is the dullest time of the year in their business, viz., the last three weeks of the year and the first ten days of the new year. The foreign speculative interests who have advanced the market over 3c per lb. in December evidently were so sure of their position that the attitude and condition of trade, time of year and consumption in the country that uses about one-half the entire production, was to them a matter of apparently little interest, and did not seem to have entered into their calculations. Of course we all know no speculative or trading business is at present done in the American market and that the trade is a matter of importing and selling to consumers, but American interests in close touch with the situation here are among the largest operators in the London speculative market and our report received by cable that a decline was caused to-day by absence of Eastern and Chinese orders and indifference of interests in close touch with America is probably a correct statement of causes for decline.

TIN PLATES.

Tin plates are steady and unchanged at jobbing prices: Melyn, $6.50@7; Alloway, $5.75@6.25; coke, $4.87½@6.50; ternes, $5.25@8; additional X, $1.50@1.75 more.

LEAD.

There is no change to note in pig lead, the Smelters' Association holding firm at 4.32½c for 50-ton lots, and 4.37½c for 25-ton lots. Spot lots in New York are quoted at 4.37½c. The jobbing quotation is steady at 4¾@5c, according to quantity. The London quotation is £11 7s 6d. St. Louis is firm at 4.17½@4.20c. Manufactured lead is unchanged at: Lead-pipe, 6¼c; sheet, 7c; tin pipe, 45c; tin-lined pipe, 12½c; old lead in exchange, 3¾c; tea lead, 3¼c.

SPELTER.

Spelter is firm at: Found lots, New York, 5c for spot and 4.95c for futures; jobbing, 5½@6½c; sheet zinc, cask lots, 6½@7c; small lots, 7½@8c; St. Louis is firm at 4.75@4.77½c; London, £21 15s.

Antimony is quiet at: Round lots, New York, Cookson's, 7c; Hallett's, 6¼c; United States Star, 6¼c; Italian, French and Japanese, 5¾@6c.

SILVER.

The advance in the price of silver of ¼d in London and ½ cent here started in the London market and is attributable to the purchases by the Indian Government and a demand has also sprung up from the Indian bazars. The market is strong and supplies of silver are well controlled.

NICKEL.

Nickel at present is quoted from 40 to 47 cents per pound for large quantities down to ton lots, according to size and terms of order, the price for smaller lots according to quantity running as high as 65 cents per lb.

QUICKSILVER.

The New York price is now $46.00 per flask for large orders, with a slightly higher figure for small lots. In San Francisco prices are steady, and the quotation is $44.00 to $45.00 per flask for domestic orders. For export orders $41.50 to $42.00 per flask is quoted. The London price is now £8 5s per flask, with the same figure quoted from second hands.

ALUMINUM.

Aluminum is steady and unchanged at: No. 1 ingot, 33c per lb.; No. 2, 31c.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x14	$10 25
IC	14x20	7 25
IX	14x20	8 40
IXX	14x20	9 60
IXXX	14x20	11 60
IXXXX	14x20	12 88
IC	20x28	14 25
IX	20x28	16 55
IXX	20x28	18 95
IXXX	20x28	21 50
XXXX	20x28	23 85

COKE PLATES.

Cokes, 180 lbs	IC	20x28	8 85
Cokes, 200 lbs	IC	20x28	9 05
Cokes, 216 lbs	IC	20x28	9 45
Cokes, 316 lbs	IX	20x28	11 65

PIG IRON.

Lake Sup. Charcoal	$16 50@$17 50
Local Coke Fdy No. 1	15 00@ 15 00
Local Coke Fdy No. 2	14 00@ 15 00
Local Coke Fdy No. 3	14 00@ 14 50
Local Scotch Fdy No. 1	15 50@ 16 00
Ohio Strong Softeners, No. 1	16 80@ 17 30
Southern Silvery	15 35@ 16 35
Southern Coke No. 1	13 35@ 13 85
Southern Coke No. 2	12 85@ 13 35
Southern Coke No. 3	12 35@ 12 85
Southern Coke No. 4	11 80@ 12 35
Southern No. 1 Soft	14 85@ 15 35
Southern No. 2 Soft	14 35@ 15 10
Alabama Car Wheel	19 85@ 20 85
Malleable Bessemer	14 75@ 15 25
Jackson Co. Silvery	18 30@ 20 15

BLACK SHEET STEEL.

No. 16 per 100 lbs.	$2 55
No. 18-20 per 100 lbs.	2 60
No. 22-24 per 100 lbs.	2 65
No. 25-26 per 100 lbs.	2 70
No. 27 per 100 lbs.	2 75
No. 28 per 100 lbs.	2 85
No. 29 per 100 lbs.	3 15

SMOOTH STEEL.

Wood's Smooth	No. 15-17	2 85
" "	No. 18	2 95
" "	No. 20	2 85
" "	No. 22-24	2 85
" "	No. 25-26	3 05
" "	No. 27	3 15
" "	No. 28	3 25

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

GALVANIZED IRON

F.O.B. Chicago 75%

HOOP IRON.

¾x22	¾x20	¾x20
$2 95 100lbs.	$2 85 100lbs.	$2 75 100lbs.
1x20	1¼x19	1½x19
$2 75 100lbs.	$2 60 100lbs.	$2 50 100lbs.

PAINTED CORRUGATED IRON.

8 x 2½ feet Sheets. 28 gage, per 100 lbs. $2 60

SOLDER.

XXX Guaranteed ½&½ per lb.	19½c
Commercial ½&½ per lb.	18½c
No. 1 Plumbers	16 c

SHEET ZINC.

600 lb. Casks base, per cwt.	$5 90
300 lb. Casks per cwt.	6 10
Sheets per cwt.	6.15

COPPER.

Copper base, 22c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@4 62½c
Bar	6¼
National (White) brands (in less than 100 lb. lots) per lb	7½

HARDWARE.

ADZES.

Carpenters'.
Ajax 50%
Blood's 40&5%
Hunt's 25%
White's 12½%

Coopers'.
Barton's 20%
White's 15%

Ship.
Ajax 50%
Blood's 40&5%
Hunt's 25%
White's 12½%

AMMUNITION.

Caps, Percussion—per 1,000.
F L Waterproof, 1-10s 40c
G D 35c
Eley's 52c

Cartridges.
Peters Rim Fire Ctgs 50&3%
Peters Cent Fire, Pistol & Rifle 25&3%
Peters Cent Fire, Military and Sporting Ctgs 15&8%
Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.
Peters Blank Ctgs. 22 cal $1 18
Peters Blank Ctgs. 32 cal., C. F. 4 40
Peters B B Caps, Round ball $1 44
Peters B B Caps, Conical ball $1 85
U. M. C. Rim Fire Ctgs 50&3%
U. M. C. Cent. Fire, Pistol & Rifle 25&3%
Winchester Cent. Fire, Military and Sporting Ctgs 15&8%
U. M. C. B B Caps, Round Ball $1 75..18%
U. M. C. B B Caps, Con. Ball $1 85 net
U. M. C. Rim Fire Shot Ctgs. 50&15&3%
U. M. C. Cent. " " 25&15&3%

Primers.
Berdan Primers $1 00
Peters Primers 1 20
U. M. C. Primers 1 20
Winchester Primers 1 20

Shells
Peters Empty Paper Shells, 10 and 12 gauge. League 25&2%
Peters Empty Paper Shells, 16 gauge. League 20&2%
Peters New Victor Nitro Shls. 20&2%
Ideal 25&7%
Peters Loaded Shells. League and Referee Semi-Smokeless 40&1%
Peters New Victor Loaded Shells with King's Smokeless 40&6%
Ideals Loaded with King's Smokeless 40&10&10&1%
U. M. C. New Club, 16 gauge 20&2%
U. M. C. New Club 25&2%
U. M. C. Nitro 20&2%
U. M. C. High Base 20&2%
Winchester Blue Rivals } 40&1%
Winchester Yellow Rivals }
Winchester Repeater 20&2%
Winchester Leader 40&6%
U. M. C. Loaded Shells, Black Powder } 40&1% full cases
Winchester Loaded Shells, Black Powder }
U. M. C. } Smokeless 40&10&10&1% full cases
Winchester }

Gun Wads—per 1,000.
Peters Gun Wads 18%
U. M. C. Gun Wads 18%

Powder. Each
King's Smokeless, kegs $11 30
" " ½ kegs 5 80
" " ¼ kegs 2 97
" " 1-lb. cans 51
" " 1-lb. " rifle 70
Dupont's " 50-lb. drum 22 45
" " 25-lb. kegs 11 30
" " 12½-lb. kegs 5 80
" " 6¼-lb. kegs 2 97
" " 1-lb. cans 51

Shot.
Dropshot, sizes smaller than B, 25-lb. bags, per bag $1 60
Drop shot, B and larger sizes, 25-lb. bags, per bag 1 85
Buck Shot, 25-lb. bags, per bag 1 85
Chilled Shot, 25-lb. bags, per bag 1 85

ANVILS.

Trenton, 70 to 80 lbs 9½c per lb
Trenton, 81 to 150 lbs 9c per lb

AUGERS.

Boring Machine 60&10&5%
Carpenters' Vul. 60&10&5%
Hollow: Ives' New Pattern 25%
Bonney's—list $30.00 65&10%
Stearn's, No. 1 doz. $42 00
Stearn's, No. 3 " 33 50
Post Hole.
Dalbey, 8-inch per doz. $ 5 75
Digwell, 8-inch " 13 00
Howe's, 6 and 8-inch " 12 50
Iwan's Improved 40 & 5%
Vaughan's, 4 to 9-inch per doz. 6 50
Rafting.
Snell's 50&5%
Ship
Ford's, with or without screw, 40-5%
Snell's " " " 40-5%

AWLS.

Brad, handled per doz. $0 28
shouldered, ass'd. 1 to 4 per gr. 95
patent, ass't'd, 1 to 4 " 90
Harness, common " 1 10
patent " 90
Peg, shouldered " 95
patent " 40
Scratch, No. 2, handled " 4 40
No. 1, socket handled per doz. 1 15
No. 20 Hurwood " 2 00
Sewing, common per gr. 90
patent " 90

AXES.

Boys', Handled:
Camp Fire, 3-lb., per doz $5 75
" " 4-lb., freighters', per doz. 6 75
Cast Steel, good grade, pr. dz. 5 50
Pioneer, per doz 6 75
Broad:
Peerless 50%
Red Warrior, per doz $22 00
Firemen's, per doz 15 50
Single Bitted (without handles)
Gladstone, per doz $6 75
Hubbard's " " 6 50
Hunt's " " 6 25
Lippincott's " " 6 25
Mann's " " 6 50
Pioneer " " 6 50
U. S. A. " " 7 75
Valley Forge " " 6 00
Second Quality " " 5 75
Double Bitted (without handles):
Lippincott's per doz $8 50
Mann's " " 8 50
Pioneer " " 9 25
U. S. A. " " 11 00
Valley Forge " " 8 25
Ship, Blood's " " 18 50

BALANCES, SPRING.

Frary's 50%
Pelouze 20%

BAGS, PAPER NAIL.

Pounds 3 5 10 16 20 25
Per 1,000 $1 60 1 85 2 60 3 40 3 90 4 75

BARS, CROW.

Pinch or Wedge Point cwt. $3 40

BEAMS—SCALE.

P. S. & W. Co 40%

BEATERS.

Carpet, Rattan per doz $2 40
Raymond's Steel Wire, " " 8
Woven Wire, No. 4 " " 1 10
Egg.
Dover Pattern per doz. $0 70
Genuine Dover " 0 90
Mammoth Dover " 1 75
Lightning " 0 84
Lyon's (standard size) " 1 75
Whip, French " 1 35
Spiral " 0 40
Spoon " 0 40
Surprise per gro. 1 45

BELLOWS.

Blacksmiths' 70&5%
Hand, 8 in. per doz. $ 6 85
10 in. " 8 40
Molders', 12 in. per doz. 13 00

BELLS.

Call.
2¾ in. nickeled bell, per doz. $ 1 35
2¾ in. " brass bell " 3 60
3 in. " " " " 7 5
3 in. " silver alloy bell, per doz. 16 50
4½ in. " brass bell and base per doz. 14 50
Cow.
Ordinary Goods 70&5%
High Grade 60&10%
Jersey 70&10%
Door.
Bigelow Automatic, per doz. $9 50
Rotary.
3 in. bronzed iron bell " 5 25
3 in. nickeled " " " 7 5
3½ in. " " " " 9 0
Hand.
Hand Bells, Polished 60@60&10%
White Metal 50%
Nickel Plated 40%
Swiss 60&5%
Silver Chime 33⅓%
Miscellaneous.
Church and School, Steel Alloy, 50, 10 & 5%
Farm, lbs. 40 50 75 100
Each. $1 10 $1 30 $1 85 $2 65
Miscellaneous Cont.
Strapped Sheep per doz. $1 90
House Gong 40&5%
Sleigh, Round, Loose 40&5%

BELTING

Leather—List dated Nov. 12, 1901.
Standard 75%
Eclipse 60-10&5%
Extra Grade 50&10%
Rubber—
Standard 75&5%
Amherst 55&10%
Extra 60&2½%

BEVELS—TEE.

Stanley's, rosewood handle, new list 40&5%
Stanley's Iron handle 40&5%

BINDING—OIL CLOTH.

Zinc 75, & 10%
Brass 75%
Brass Plated 75 & 10%

Auger. BITS.
Extra Double Spur 70&5%
Ford's Car and Machine 40&10%
Ford Improved 40&10%
Ford's Ship 40&10%
Irwin 30&10%
New Jenning's 50%
Russell Jenning's 25&7½%
Clark's Expansive 50, 10&5%
Steer's " Small new list $22.0
Irwin Car 30&10%
Snell's Car 60&5%
" Ship 40&5%
" " Auger Pattern Car 40&5%
Center 40&10%
Countersink—
Wheeler's per doz. $1 60
American Snail Head " 0 70
" Rose " 0 80
" Flat " 0 70
Buck Bros'. Flat " 2 60
German " 0 70
Dowel, New Jennings 40&10%
Gimlet—
Standard Double Cut 50&5@50&10%
German Pattern per doz. $0 45
Gouge " 0 80
Spoon " 0 80
Countersink " 1 30
Reamer—
Buck Bros.' ½ Round " 3 75
" " Square " 2 50
Standard ½ Round " 0 75
" Square " 0 75
German Octagon " 0 75
Screw Driver—
Round Shank " 0 45
" " extra quality " 1 40
Square Shank " 1 10

BLACKING—STOVE (See Polish.)

BLADES—SAW.

Butchers'—
Standard ¾ & 1¼ in 60&5%
Clock Spring 60&5%
Star 30%
Hack—
Disston's 35&5%
Griffin's 35&5%
Star 30%
Wood—
Jackson's per doz. $2 25
Disston's—No. 6, 16, 26 & 045, $4 20; No. 11, $6.30.
W. M. & Co.'s No. 20 per doz. $5 50
Match— BLOCKS.
Wooden 50&10%
Steel 40&10%
Tackle—
Wooden 70&5%
Steel 50, 10&5%

BOARDS.

Stone 40%
Wash—
Anchor per doz. $1 60
Globe " 2 10
Banner " 2 60
Crystal " 3 15
Brass King " 3 15
Nickel Plate " 3 15
Enamel King " 3 15

BOBS—PLUMB.

Carpenters', 8½ oz. iron pr dz. $0 65
1½ lb. " " " 1 60
2¾ lb. " " " 1 80
12 oz. lead " 3 00
6½ oz. brass " 3 30
Mason's, 3 lb. lead " 4 00

BOILERS—FARM.

Profit 30&5%
Solo 35&5%

BOLTS.

Carriage, Machine, Etc.
Carriage, ¾x6 and sizes smaller and shorter 75&5%
Carriage, ¾x4 and sizes larger and longer 75%
⅝x6 and smaller 75& %
⅝x6 to ¾x12 75%
¾x12 and larger 70&10%
Elevator 50-10&5%
Plow 50&10%
Stove 80-5%
Tire 75¼&5%
Wagon Box Strap 70&10%
Mortise Door—
Gem 50-10&5%
Ives' 50&10%
Barrel—
Cast 50%
Wrought 50&5%
" Bronzed 75&5%
Flush, Wrought, B. K. 40&5%
Spring—
Wrought 75&10%
" Brass 75&10%
Square—
Cast 40%
Wrought 60-10&10%

BORERS.

Angular, Miller's Falls, per doz $12 75
Bung, Common Ring with Handle—
Inches 1¼ 1¾ 2
Per doz $6 00 6 90 8 10

BORERS—CONTINUED.

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2.00 each....35-10&5%

BOXES.

Mail, No..... 5 10 20
Per doz.....$2 65 10 50 13 00
Mitre—
New Langdon.....15&5%
Olmsted's 15%
Stanley's.....30%
Seavey's .....per doz 8 00
Twine, Nos... 20 30 25 121
Per doz $1 50

BRACES.

Common Ball.....$1 35@1 45
Barbers' Pattern .....60&10%
Fray's Gen. Spofford's.....50&10%
" No. 66 to 146.....50&10&7½%
P. S. & W. Co.'s Peck's Adjustable.....50-10&5%

BRACKETS.

Hay-Rack, Wenzelmann's No. 1, $12.60; No. 2, $13.20 per doz.
Shelf—
Cast Iron, Plain .....50&10%
Stanley's Wrought Steel.....
.....70-10&2½%
Wire.....75-10&5%

BROILERS.

Wire .....70&10%
Crown, Self-Basting, No.80..doz. $2 90

BUCKETS.

Pump Rubber—
Wychoff.....per gr. $4 75
Cooper..... " 5 50
Champion ..... " 7 50
Victor ..... " 9 50
Star..... " 5 00
IXL..... " 6 75
Well—
Galv'd Qts..... 8 10 12
Per doz $2 50 2 85 3 15
Wooden, top ear, plain, per doz 3 50
" " swivel " 4 00
" side-strap, plain " 3 00
" " swivel " 4 75

BUCKS, SAW.

Folding .....per doz $1 75

BURS, RIVETING.

Copper Burs Only.....35-10&5%
Tinners' Iron Burs Only.....70%

BUTTS.

Cast-Iron.....65&10%
Wrought Brass.....20%
Wrought Steel Bright—
Nos. 800, 804, 808, 810, 814 and 834
.....70-10-10&5%
Nos. 838, 840 and 842 ...70-10-10&5%
Nos. 822 and 828.....75-25-10-10&5%
Wrought Steel, Japanned—
Nos. 731 and 737.....70&10&10%

CALIPERS.

Double .....40&10%
Inside and Outside.....40&10%
Wing.....40&5%

CALKS.

Logger's Boot,(Lufkin R. Co's.)
.....per M $3 65
Toe.
Shoenberger.....per lb. 5c
Bessemer ..... " 5½c
American ..... " 7½c
Swedes..... " 8½c

CANS.

Cheese Factory Can Stock—
Gallons.... 15 20 30 40
Per set....$3 15 $3 20 $3 40 $4 65
Milk
Elgin Pattern,
Nos.....808, 810, 88.
Gal. 8 10 8
per doz....$22.50 $22.75 $23.15
New Elgin Pattern,
Nos. 105 108 110
Gal. each, 5 8 10
Per doz., $16.75 $18.50 $19.85
Iowa Pattern.
Nos. 508 610
Gal. 8 10
Per doz. $21.50 $22.75
New York Pattern,
Nos. 908, 910,
Gal. each, 8 10
Per doz. $25.15 $26.95
Oil—
1 Gal. glass, Daisy....per doz. $2 35
1 " cushioned " 3 90
Star, gals..... 1 2 3
Per doz..... $1 85 $3 00 $3 90
Per doz.
Champion Faucet, 5 gallon...$5 65
Sterling Tilting....5 " ... 8 25
"High C" Pump...5 " ... 9 25
Eureka Pump.....5 " ... 12 25
Wood Jacket.....50-10&5%

CAPS—GUN.

See Ammunition.

CARRIERS.

Hay—
Myers' Imperial.....each $3 40
" Clover Leaf..... " 3 40

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....35%
Bed.....60, 10&5%
Common Plate—
Brass wheel.....60&10%
Iron and porcelain wheel.60, 10&5%
Philadelphia Plate.....70&5%
Martin's.....40-10&5%
Payson's.....75%
Tucker's—Wood and iron wheel..70%
" Rubber wheel.....65&10%

CATCHERS—GRASS

Lieder's No. 1.....per doz. $6 25
Eureka..... " 4 25
Deal No. 4..... 50

CHAIN AND CHAINS.

Breast Chains—
Doubleslack.....doz. pairs $5 00
With Covert snaps " 4 75
" slide..... " 2 90
Without slide..... " 2 60
Bright Ox Chains—
5-16in. $5 70: ⅜in. $4 65 per 100 lbs.
Bright Coil Chain—
American, new list.....33⅓%
German..... ...60-10&5
Triumph, new list.....30%
Cable Coil Chain—
Inch..... 3-16 ¼ 5-16 ⅜
Per 100 lbs...$9 75 $6 45 $5 20 $4 15
Inch ..... 7-16 ½ ⅝ ¾
Inch .....⅞ $8 70 $1 00 $3 65
Per 100 lbs...$4 10 $3 95 $3 90 $3 75
Cable Log Chain—Advance 25c per 100 lbs. on Cable Coil.
Cow Tie Chains—
American 2 toggle.....40-10 & 5%
" toggle and snap, 40-10&5%
" open and closed
ring.....40&5%
Halter Chains—
American, new list.....33⅓%
German.....60-10&5%
Niagara, new list.....40&5
Triumph " 30%
Jack Chain—
Brass.....60%
Iron.....60%
Picture Chains—
Light Brass, 3 ft.....per doz. 63c
Heavy " 3 " ..... " 75c
Pump Chain—Galvanized per 100 lbs..... $4 45
Safety Chain—Brass.....60&10%
Stretcher Chains—
5-16 in., $7.75—⅜ in , $7.00 per 100 lbs.
Tie-Out Chains—Browns.....70&10%
Trace Chains—Western Standard—
6½— 6-2..... .....per pair 26c
6½— 8-2..... " 30c
6½— 8-3..... " 29c
6½—10-2..... " 35c
7 —10-2..... " 40c
Add 2c per pair for Hooks.
" 2c " for Twist Link
Wagon Stay Chains—
Inch ¼ 5-16 ⅜
Per 100 lbs. $6.50 $6.00 $5.25
Well Chains—
With Swivel.....per doz. 95c
Without " ..... " 80c

CHALK-CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l
Crayon..... " 5½c

CHARCOAL.

In barrels ..... per bu. 21c

CHECKS-DOOR.

Blount 30%
Blum-Jap'd, $6.25; Brzd., doz... $7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box—
Inches..... 10 12 14
Round...per doz. $2.10 $2.25 $2.75
Flat.....per doz. 2.85 3.60 4.20
Cold—
Good quality.....per lb. 12@ 20c
U.S.A.,extra quality..per lb. 28c
Socket, Framing and Firmer—
Barton's..... 20%
P S. & W. Co's..... 70%
For beveled back, add..per doz..... 60c
Tanged, Firmer—
P. S. & W. Co's.....35&5%
With Handles add... per doz. 60c
Choppers, Enterprise Meat—
No. 12..... $2 75
No. 22..... 4 50

CHUCKS-DRILL.

Standard Tool Co.'s 40%
Goodell's, for Goodell's Screw
Drivers.....per doz. $6.25
Yankee, for Yankee Screw
Drivers..... ..... 5.00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each $3.90 4.15 4.40
Belle, Barrel.....70&5%
Common Dash, Gal.... 4 5 7
Per doz..... $7.25 7.75 8.25
Hero.....70%
Union, Gal..... 5 7 10
Each $3.65 3.90 5.00

CLAMPS

Adjustable—Martin's 40%
Carpenters'—Steel Bar..... 30%
Carriage Makers'—P. S. & W. Co.'s.....40, 10&5%
Hose—
Sherman's, brass, ¾ in.,
.....per doz. 33c
Double, brass, ¾ in...per doz. 65c
Saw Filers—
Disston's list, $30.00..... 30%
Stearn's, No. 0, $3.50, No. 1, $11.50, No. 3, $5.50 doz.
Wentworth's..... ..... 40%

CLAWS-TACK.

Cast, wood hdle..per doz., 45@ 60c
Forged steel, wood handle
.....per doz. 80c
Solid Steel.....per doz. $1.60
Giant..... .....per doz. .60

CLEANERS.

Drain—
Iwan's Adjustable.....50%
Iwan's Stationary.....40%
Pot—Wire.....per doz. $0.45
Side-Walk—Steel.....per doz. 2.15
Window—
Peerless.....50, 10&5%
XLCR.....65&10%

CLEAVERS.

Family—Ajax, In..... 6 7 8
Per doz $5.50 5.75 6.25

CLEVISES.

Malleable.....per lb. 2¾c

CLIPS.

Axle.....65&5%
Damper—
Standard .....per doz. $0.70
Troy ..... " .35
Hame..... " .20
Emery— CLOTH.
Ajax.....50&10%
B. & A.....50%
Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $1.85
9 to 12 " " " " 2.15
2 to 8 " galv, " " 2.70
7 and 8 " " " " 3.25
An extra charge is made for 50 ft lengths, and a still further advance for smaller pieces.
Screen Wire—
12 mesh, painted, per 100 sq.ft. $1.20
14 " " " " 1.85

COCKS--BRASS.

Compression Bibb.....60&10&5%
" Lock.....60&10%
Lever Bibb.....70%
Liquor .....per doz..$8 75
Racking .....60&10%

COFFEE MILLS.

Enter. Mfg. Co., list Jan 17, '93...25%
Parker's.....50%
Arcade.....60&10%

COLLARS--STOVE PIPE.

Inches 5 6 7
Plain Tin....per gr.$2.50 $2.80 $3.75
Japanned Tin, " 3.90 4.20 5.40
Lacquered Brass" 3.30 3.60 4.80

COMBS--CURRY.

Nos. 000 20 321 330 417 416
Per doz.$0.32 .80 1.00 .95 .80 1.00
Nos. 531 533 530 535 545 390
Per doz $0.96 1.20 1.10 1.65 1.40 1.80

COMPASSES.

Carpenter's..... 70%
Pencil—Faber's.....per doz.$1.00

COOLERS--WATER.

Galvanized Lined—Lever Faucet.
Gal. 2 3 4 6 8
Each $1.35 1.65 2.00 2.35 2.95
Galvanized Lined—Telegraph Faucet
Gal. 2 3 4 6 8 10 15
Each$1.65 2.00 2.35 2.65 3.30 3.65 4.90
Porcelain Lined—
Gal. 3 4 5 6 7 8 10
Each$4.50 5.75 7.00 7.75 8.60 10.40 12.25

COPPER—SEE METALS.

COPPERS.

Soldering--1 to 2 lb.....per lb. 25@29c
3 lb. and larger..... " 23c

CORD.

Picture--White Wire--List October 1900.....80&10%
Sash--
Baltic Braided Flax...per lb. 21 c
India Hemp, cable laid " 13 c
" " hawser " " 12 c
" " plain " " 13½c
Italian " cable " " 21½c
Russian " " " " 17 c
Samson, white " 31½c
" spot " 30½c
Silver Lake, white " 29 c
" " drab " 29 c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....50%
Williamson's Forged Worm.....50%

COTTERS--SPRING.

5-16 in. and smaller..... .....80&5%
⅜-in. and larger.....75%

COUPLINGS--HOSE.

Brass .....per doz. $1.00
Brass Plated..... " 85

COVERS, WAGON--SEE TENTS, CRADLES--GRAIN.

Morgan's Grapevine ..per doz.$22 25

CRAYONS--SEE CHALK, CROOKS--SHEPHERDS'.

American Pattern .....per doz. $6 75
Montana " ..... " 8 00
Scotland " ..... " 8 00

CROW BARS.

Pinch or Wedge Point, per 100 lbs..... $3 40

CUTTERS.

Meat—
Enterprise Nos. 5, 10, 12, 22, 32, and 42..... .....25%
No. 100. list, $18.00.....40&10%
Nos. 2 and 4.....35%
Ideal.....per doz. $9.75
Universal....No. 1 2 3
Per doz.....$10.75 $13.00 $18.00
Pipe-Stanwoods No. 1 2 3
Each.....$ .85 1.50 4.00
Slaw and Crout--
3-knife Crout.....per doz. $9.25
1 " Slaw..... " 1.50
2 " " ..... " 2.10
Washer..... " 7.75

DAMPERS—STOVE PIPE.

Standard.....50&10%
American.....40&10%

DIES--STOCKS AND

Discount..... 40%

DIGGERS.

Post Hole—
Iwan's Split Handle..per doz. $8.00
Iwan's Perfection....per doz. 8.00

DIVIDERS.

Wing 70%
Extension Wing.....35&5%

DIGGERS—POST HOLE.

Atlas .....per doz. $6.50
Eagle..... " 6.25
Eureka..... " 6.50
Hercules ..... " 10.25
Ryan's..... " 17.00
See also Augers—Post Hole.

DOORS--SCREEN.

⅞ in. 4 panel painted per doz. $ 6.85
1⅛ " " " 7.10
1⅛ in. 3 panel natural pine,
fancy.....per doz.. 11.10

DOOR HANGERS—BARN.

Single Flange, D. B. Rail,
.....per 100 ft. 1 60
Novelty Check Back,
..... 3 in 4 in 5 in 6 in
Per doz. pairs, $2.60 $3.90 $4.95 $6.25

DRILLS.

Bit Stock.....60%&65&5%
Blacksmith's Twist.....60%
Breast--
Common.....each, $2.25
Millers' Falls..... " 2.10
Hand--
Goodell's Automatic--per doz.
No. 01 No. 03 No. 3 No 20
$7.75 $12.50 $14.25 $11.00
Goodell's Single Gear per doz. $16.00
Millers' Falls " " " 12.50
" " Double " " 15.00
Reciprocating—
Goodells'.....per doz. $17 00
Bit Stock.
Standard List....60&5%@50%@10%

DRIVERS--SCREW.

Hurwood .....40&10%
Standard.....65&10%
Ajax..... 70&5%
Champion..... 50%
" Pattern.....75&5%
Clark's Interchangeable.. .... 33⅓%
Edison..... 60%
Reed's Lightning..... 50%
Goodell's Spiral.....50&10&5%
Yankee Ratchet..... 50%
" " Spiral.....50&10&5%

ELBOWS.

Conductor.....60%
Adjustable Stove—In. 5 6 7
Smooth....per doz. $0.95 0.95 1.40
Plan'd..... " 2.10 2.35 2.00
Corrugated Stove—In. 5 6 7
Smooth.....per doz. $0.95 .95 1.40
Pol'd..... " 1.70 1.75 2.60
Plan'd..... " 2.60 2.85 2.50
Four-Piece Stove—In. 5 6 7
Smooth....per doz. $0.57 .60 .95
Pol'd..... " 1.00 1.05 1.50
Plan'd..... " 1.50 1.70 2.60

EMERY--TURKISH.

Size .....5-lb. pkgs. ½ kegs, kegs.
No. 60 to 150, 25 lb. 6½c 4½c 4½c
Flour.... " 5½c 3½c 3½c

ENAMEL--IRON.

English, ½-pt. cans...per doz. $1.50
Nubian, " " ... " 1.80
O. V. B., " " ... " 1.25
Peerless 1 50

EXTRACTORS--PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B.W.
Drifting Pick .....60&10%
Hooks and--
Brass.....60&5%
Iron .....65&10%

FASTENERS, STORM SASH.

Moore's.....per doz. $0 80
Schroeder's..... " 1 50
Sensible..... " 1 10

FASTENERS, BLIND.

Zimmerman's.....Net

FAUCETS.

Angle Plug.....per doz. $0 84
Brass--Andrew's .....60&10%
Petroleum.....60-10&5%
Wood--Cedar .....40&50%
Cork Lined..... 60%
Metal Key..... 65&5%
Measuring--Enterprise.....35&5%
See also Cocks.

FILES AND RASPS

Black Diamond.....70&10%
Disston's .....75&10%

FILTERS.

Improved Natural Stone.$9 50@13 50
Subject to large discounts.

FORCEPS—PIG

Barber's.....per do $7 25
Superior..... " 4 75
Whisson's Imp 6 00

FORKS

Barley—
Steel.....60& 20%
Wood, 4 tines,$5.50; 6 tines,$7.50 doz
Coal 40%
Coke 40%
Cottonseed 40%
Hay—
Diamond, 2 tine.....50, 10&5%
" 3 " .....60&5%
" 4 " .....60⅓&10%
Golden Eagle, 2 tine .....60⅓&10%
" 4 " ..... 60&1 %
Digging..... .....60&10%
Scoop..... .....35%

FORKS—CONTINUED.

Header—
Diamond, 2 tine.....67½&10&5¢
" 3 " .....65¢
" 4 " .....65¢
Golden Eagle, 4 tine.....10&10&5¢
Manure—
Diamond.....60 15&2½¢
Golden Eagle.....60½&10¢
.....40¢
Spading—
Diamond.....70&2½¢
Golden Eagle.....70&2½¢
Hack saw— FRAMES
Crown.....per doz., $ 6 25
Miller's Falls..... " 10 00
Star..... " 2 85

FREEZERS—ICE CREAM

Arctic—Qts... 1 2 3 4 6
Each.....$1 10 1 30 1 50 1 80 2 30
Qts..... 8 10 12 15
Each.....$2 95 3 80 4 50 5 20
White Mountain, with Crank—
Qts..... 1 2 3 4 6
Each.....$1 25 1 60 1 90 2 20 2 80
Qts.... 8 10 12 15 20 25
Each.$3 60 4 65 5 85 7 00 9 00 11 60

GATES.

Molasses and Oil.
Perfection.....50&5¢
Stebbin's.....75&10&5¢

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s..20&10&2½¢
Cream Pail, Fairmont, per doz..$3 75
Marking, Mortise, etc......
.....50&10¢@50&10&5¢
Saw—Atkin's agle. 55c, dbl. 80c pr doz.
Wire.
Disston's.....25¢
P. S. & W. Co.'s.....20¢

GIMLETS.

Discount.....40@40&10¢

GLASS—WINDOW.

Single and double strength, 6x8 to 16 x24.....90&5¢
Larger sizes.....90..5¢

GLASSES—LEVEL.

Stanley R. & L. Co.....50&5¢

GLUE

Bulk.
B Amber.....per lb 9¾c
A White.....per lb 12½c
H. S. Amber.....per lb 17 c
Liquid.
Eagle.....40 ¢
LePage's—
List "A".....37½¢
List "B".....33½¢
List "C".....25 ¢

GOODS.

Bright Wire.....80&15¢

GREASE, AXLE.

Wood Boxes.
Diamond.....per gr. $5.00
Frazer's.....9.25
Hub Lightning.....5.25
Paragon.....6.75
Wood Pails.
Frazer's, 15 lb. 78c, 25 lb. $1.30 each.
Hub Lightning, 15 lb. 52c, 25 lb. 68c each.
Tin Cans.
1 lb. Frazer's carriage, pr. doz. $1.30
1½ lb. " wagon.. " 1.30
3 lb. " " " 2.40
5 lb. " " " 3.50

GRIDDLES

Soapstone.....40&10¢

GRINDSTONES

Family—In..... 7 8 9
Per doz.....$6 25 9 00 10 50
Loose.
Per ton.....$20 00@$21 00
Mounted—
Ball Bearing..... 1 2 3
Each.....$3 40 3 25 3 15
Common Bearing.. 1 2 3
Each.....$2 90 2 70 2 55

HAFTS—AWL

Brad—Common.....per doz., $0.18
Peg—
Common..... " 21
Patent, plain top..... " 46
" leather top .. " 52
Sewing—
Common..... " 21
Patent..... " 52

HALTERS

Jute Rope.....per doz 80 80
Sisal Rope..... " 1 95
Web..... " 2 10
Leather, rope tie..... " 6 25
" leather tie... " 8 25

HAMMERS—HANDLED

Blacksmiths' Hand
Maydole's.....40&10¢
Engineers'—
Maydole's.....40&10¢
Farriers'.
Maydole's.....35&5¢
Machinists'.
Maydole's.....40&10¢
Nail.
Ajax.....per doz $5 75
Calumet..... " 3 40
Cast.....per doz $1 10@$1 50
Maydole's.....30&7½¢
Vulcan.....35&5¢
Riveting.
Maydole's.....35&5¢
Shoe.
Cast.....per doz 75c
Tack.
All Iron.....per doz $0 35
Pol'd Iron, Hickory hd " 0 52
Mall. Iron, Inlaid..... " 1 50
Magnetic 1 2 3
Per doz..... 70c 80c 95c
Magazine.....per doz $4 75

HAMMERS—HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs.....75&5¢
5 lbs. and over.....75&10¢
Masons'—Single & Double Face..75¢
Auger. HANDLES.
Common Ass'd.....per doz $0 36
Peck's Adjustable.... " 2 10
Roger's " .... " 4 15
Ives' " ....per set 1 25
Axe.....40¢
Chisel.
Hickory, Tanged Firmer, Assorted, 24c: Large, 26c per doz.
Hickory, Socket Firmer, Assorted, 18c: Large, 21c per doz.
Applewood, Tanged Firmer, Assorted, 27c; large, 36c per doz.
Applewood Socket, Firmer, Assorted.....per doz 24c
Coal Pick.....40¢
Drifting Pick.....40¢
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye.....per doz 42c
Blacksmiths'.....per doz 45c@55c
Machinists'..... " 39c@58c
Hatchet.....per doz 42c
Hay and Manure Fork.....40&10¢
Hoe and Rake.....40&5¢
Saw, Plain 72c, Varnished 68c per dz.
Screw Driver, Assorted 42c, Large 48c per doz.
Shovel and Spade.....40¢

Barn Door—HANGERS

Cronk's Automobile Loose Axle.....60¢
Cronk's Automobile Roller Bearing.....60&10¢
Cronk's Loose Axle Endless Run.....60&10¢
Cronk's Roller Bearing.....70&5¢
King.....per doz. prs., 5 00
Monarch.....60&10¢
"Never Jump" Hinge.....50&10¢
Peerless, Loose Axle.....60&10¢
Perfection, Roller Bearing..70&5¢
Phœnix, Roller Bearing... 70&5¢
Prouty.....per doz. prs., $5 50
Rival..... " " 3 90
Superb..... " " 6 25
Safety Flexible " " 6 65
Wagner's Adjustable.....70@10¢
Warehouse.....60¢
Conductor Pipe—
Iwan's Perfection.....50¢
Parlor Door—
Acme.....per set $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
" New Model.... " 2 80
Prouty..... " 3 00
Lundy.....50&10¢
Eave Trough—
Baker's.....per gr., $2 60
Imperial.....10¢
Wire.....25¢

HASPS.

Hinge, Wrought.....70&5¢
With Staples—See Staples.

HATCHETS.

Ajax.....40&10&5¢
Blood's.....40&10¢
Cast Claw.....per doz $1 50@$1 75
Cast Shingling.... " 1 20
Duffy's Barrel.....per doz 17 50
Germantown.....25&5¢
Hammond's.....30&10&5¢
Roger's Ideal.....per doz $5 25
Underhill's Star Lath.....40¢
S. A.....30&10¢

HAY RACK BRACKETS.

Wenzlemann's No. 1, per doz...$12 60
" No. 2, " ... 13 20

HINGES.

Blind.
Clark's Gravity, per doz sets....80c
Parker's.....65¢
Shepherd's Noiseless, for Wood casing.....doz. $1 05
Gate.
Clark's, 1 2 3
Hgs & Lchs, dz.. $2 35 $2 60 $3 60
Hinges Only, " .. 1 70 1 90
Latches Only," .. 0 70 0 75
Knuckle.....per doz prs $6 00
Lead's..... " sets 6 75
Superior..... " prs 9 25
Spring.
American.....25¢
Bommer Bros. Ball B'g Floor 40-10¢
Bommer Bros. Spring Hinges .40¢
Chicago.....25&5¢
Clover Leaf.....per gro $9
Columbia Dbl. Acting....40&10&5¢
Gem.....25¢
Ideal Detachable,....per gro $12 00
New Idea..... " 9 60
Oxford.....20¢
Wrought Iron.
Light Strap Hinges.....80-10&5¢
Heavy Strap Hinges.....
.....80-20-10-10¢
Light T Hinges.....75-10-10-10¢
Heavy T Hinges.....70-10-5¢
Extra Heavy T Hinges.....
.....80-20-10¢
Cor. Heavy Strap.....80-20-10-10¢
Cor. Ex. Heavy T.....80-20-10¢
Screw Hook and Strap.
6 to 12in.....per 100 lbs. $4.00
14 to 20in..... " " 3.75
22 to 36in..... " 3.50
Screw Hook and Eye.
¾ to 1in.....per 100 lbs. $6.50
⅝in..... " " 8.00
½in..... " 10.00

HOES.

Garden.....70&10¢
Grub:
Ajax.....50&10&5¢
Extra.....60&5¢
Hazel.....per doz $6 50
Ladies' and Boys'.....70&12½¢
Mortar.....70, 10&10¢
Planter's Eye.....62½¢
Weed.....66⅔, 10&10¢

HOOKS.

And Eyes.
Brass.....50&10&5¢
Iron.....65&10¢
Awning.....per gro $1 80
Belt
Brown's.....70&5¢
Jones'.....65&5¢
Bench—See Stops, Bench.
Box, In. 6 8 10 12
Doz.. $1 25 $1 60 $1 70 $2 25
Humason & Beckley's...pr dz $2 40
(See Goods, Bright Wire.)
Bush.
Common Axe Handle .....per doz $7 00@$8 50
Hamilton Pattern.....per doz $7 25
Chain—In. ¼&5-16 ⅜ 7-16 ½
Per 100 $7 50-7 75 $9 50 $11 25 $12 00
Clothes Line.
Japanned.....per doz 21c@22c
Galvanized..... " 35c
Coat and Hat.
Cast Iron.....per gro 72c@$1 00
Gem Wire.....65&10¢
Conductor.
Malleable.....50&10¢@50&10&5¢
Wrought.....40&10¢@50¢
Corn.
Common, unpolished, per doz. $1 30
" polished... " 1 70
"Cut Easy," .....per doz. 2 65
Clyde's, ... " 2 40
Brooke's..... " 2 65
Gate.—See Goods, Bright Wire.
Grass.
Common, Nos. 2 3 4
Per doz..... $1 70 $1 75 —
German .....per doz $1 90
Little Giant..... " 3 10
Wood's..... " 1 30
Hammock.
Common..... " 21c
With Plate..... " 36c
With Screw..... " 36c
Piggot's..... " $1 05
Lambrequin or Drapery...per gro 21c
Picture.....50¢@50&10¢
Potato and Manure.....60&15¢
Screw, Brass.....80&20¢
(See Goods, Bright Wire.)
Seat Spring.....per lb 5½c

HOOPS—TUB.

Ever Ready..... per case $1 65

HOSE—GARDEN.

Ply 3 4 5 6 8
Black, pr ft. 7½c 8½c 9½c 10½c 12½c
Cotton, 3 ply.....per ft 6½c
Red, 3 ply..... " 7½c

HUSKERS.

Boss.
Nos. E A B P PX
Dz.$1 85 $2 00 $1 95 Gr.$5 90 $5 20
Nos.3000 3000 4000 O OX
Gr.$8 10 $6 75 Dz.$1 15 $3 20 $1 65
Brinkerhoff's.....per gro 14 50
Harrington.....per gro 4 20
Ideal—Nos. 102 101 100
Per doz..... $1 35 $2 50 $2 75
Johnson's.....per gro 7 75

IRON.

See Metals—First column.

IRONS.

Curling.
Common.....per doz 33c@48c
Princess.....per doz $0 60
Yale..... " 0 84
Oxford..... " 1 10
Ruby..... " 1 50
Tourist, Folding..... " 0 90
Pinking..... " 0 60
Plane.
Wood Bench.....20&5¢
Stanley R. & L. Co. (new list)25&5¢
Sad.
Charcoal.....per doz $10 75
Common, Polished, per 100 lbs 3 50
" Nickel Plated, " 4 75
Chinese Polishing.....per doz 7 60
Laundry, No. 1, $5 75; No. 2, $6 25 per doz.
Mrs. Pott's.
No. 50 J, Enterprise...per set 81c
No. 55 J, " ... " 78c
No. 50 T, " ... " 84c
No. 55 T, " ... " 81c
No. 50, Howells'..... " 77c
No. 55, " ..... " 74c
Tailors' Sad.....per lb 4¼c
" Geese..... " 4¼c
Tuyers.
Single Duck Nest.....per doz $5 25
Double " " ..... " 6 25
Sutton.....each 2 60

JACKS.

Locomotive.....75&5¢
Wagon.
Meeker's.....per doz $1 25
Miller's No. 2..... " 7
Winner..... " 7

KETTLES.

Brass.....30¢
Caldron.....50¢
Copper.....per lb 27½c
Maslin.....70¢
Sugar.....50&5¢

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade.dz $4 25
" 12-in. Straight " .dz 2 50
Cooper's Hoop.....15¢
Corn.
Acorn.....per doz $3 60
Ajax..... " 3 25
Clipper, Light, $1 75; Heavy, $1 90 per doz.
Disston's.....per doz $3 15
Easy..... " 7 75
Rugged Razor..... " 3 40
H. S. Earle's..... " 3 15
Drawing.
Standard.....70¢
Adjustable.....20¢
Barton's Carpenters'.....10&5¢
" Folding Handle....25&5¢
Hay.
American, Sickle Edge...doz $10 25
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 25
Iwan's Sickle Edge..... 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point. " 8 75
Hedge.
Ajax, Heavy, $5 75; Ex. Heavy, $7 75 per doz.
Mincing.
Common, Single .....per doz 48c
" Double..... " 65c
Streeter, 4 Blade, $1 20; 6 Blade, $1 90 per doz.
Putty.
Common.....per doz 84c
Goodell's.....per doz $1 30@$1 80
Russell's..... " 1 75@ 2 25

KNOBS.

Base, 2¼-in. Maple, Rubber Tip, ...per gro $1 60
Door, Mineral.....per doz 0 80
Porcelain..... " 0 90
Jet..... " 0 85
Picture.....60&10&5¢

LADDERS.

Common Long.....per ft 9c@14c
Extension.....per ft 12c
Step.
Common..... " 7c
" With Shelf, add 10c.
I X L.....per ft 17c
Miller's Household. per ft 13c@15c

LANTERNS.

Bull's Eye Police.
3-in Flash Light.....per doz $6 00
2¾-in Regular..... " 4 00
3-in Regular..... " 5 00
Tubular, Berger.....40&10&5¢

LEADERS—CATTLE.

Nos. 1 2 3
Per doz... $0 70 $0 85 $3 75

LEATHER—LACE.

Cut.....50&10¢
Sides, Ex. Quality.....per sq ft 20c

LEATHERS—PUMP.

Valve and Plunger.....50¢

LIFTERS.

Stove Cover.
Japanned.....per gro $2 75
Coppered..... " 3 60
Chilkoot..... " 4 50
Devore's..... " 5 50
Zero..... " 3 90
Transom, Payson's.....70&10¢

LINES.

Chalk, Twisted in 20-ft hanks.
Nos. 15 14 13 12 11
Per doz.. 10c 12c 17c 22c 30c
Twisted in 50-ft balls.
Nos. 1 2 3 4
Per doz..... 24c 30c 36c 44c
Braided in 20-ft hanks.
Nos. 0 1 2
Per doz..... 23c 26c 32c
Masons', in 100-ft hanks...doz $1 60
Clothes.
60-ft Jute.....per doz $0 90
72-ft " ..... " 1 10
60-ft Sisal..... " 1 60
72-ft " ..... " 2 10
60-ft Cotton..... " 1 35
50-ft Braided Cotton..... 1 00

LINING—STOVE.

In Bricks.....per crate 43c

MACHINES.

Boring	Without Augers.	With Augers.
Ajax .....per doz	$5 25	$6 75
Angular... "	3 25	5 00
Boss ..... "	4 50	5 00
Upright... "	3 90	4 00

Leather Riveting.
Chicago, Pomeroy ....per doz $9 75
Excelsior..... " 3 50
Handy..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 5 00
Washing.
Boss. 1 2 3 3
Per doz.. $57 00 $63 00 $80 00 $90 00
Globe, No. 1.....per doz $51 00
O K Rotary..... " 55 50
Round Wayne..... " 36 50
U. S. Steel..... " 60 00

MALLETS.

Carpenters'.
Fibre Head, Small. Med. Large.
Per doz..... $5 00 $5 75 $6 75
Round Hickory.....per doz $1 75
" Lignumvitæ.... " 2 75
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 25
Tinners'.
Applewood..... " 1 65
Hickory..... " 80
Hickory Sheet Iron. " 85

MATS.

Door.
National Rigid..............60&5%
Queen Flexible..............50%
Stove.
Standrd Quality......per gross $2 75
Best " (Pure) " 4 75
Wire Covered Asbestos, Ex. Heavy..............per doz 1 00

MATTOCKS.

Ajax..............50&10%
Extra..............60&5%

MAULS.

Iron, lbs.	10	12	16	18	21
Per doz.	$3 40	$4 20	$5 00	5 50	$6 00

Wood face, lbs.	10	11	12
Per doz..........	$4 75	$5 00	$5 25

Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

	½ pk	1 pk	½ bu
Galvanized..per dz		$2 75	
Japanned.... "	$1 50	2 25	$2 90
Iron Bound. "	1 40	1 80	2 10

METAL.

Babbitt.
Alm..............per lb 8¾c
Best.............. " 23c
Common, No. 4.............. " 6½c
Copper Mixed.............. " 18½c
Magnolia Metal.............. " 19c
Tony.............. " 10½c
See Metals—In first column.

MICA.

First Quality..............40, 10&5%
Second Quality..............60%

MILLS—COFFEE.

Enterprise..............25&5%
National..............30%
Parker..............50&10%@60%

MOPS.

Erie..............per doz $3 15
Handled Cotton

Lbs.	¾	1	1¼	2
Per doz..	$1 85	$2 20	$2 50	$3 15

MOWERS—LAWN.

Ball-Bearing.

In.	15	17	19	21
Each......	$7 50	$8 50	$9 50	$10 50

Champion.

In.	12	14	16	18	20
Ea..	$2 20	$2 35	$2 35	$2 65	$2 75

Champion, High Chief.

In.	16	18	20
Each.........	$4 00	$4 50	$5 00

Cheap Grades.

In.	12	14	16	18
Each......	$2 10	$2 10	$2 10	$2 20

Clipper..............50&10&10%
Girard, in. 14 16
Each.............. $3 75 $4 00
Philadelphia.
All Styles Except A & E 60&10&10%
Style A..............50&10%
Style E, High Wheel..60,10,10&10%
Drevels.............. 50%
All Day..............Net Price

MUZZLES.

Horse.

Nos.	1	2	3	4	5
Doz.	$0 20	$0 50	$0 55	$0 70	$1 00

NAILS.

Horse Shoe.
Ausable..............50%
Capewell..............10%
Perfect..............40&5&
Putnam..............10-5%
Star..............35%
Picture.
Brass Head..............40&10%
Judd's..............40&10%
Brads..............80&10&10%
Wire Nails—Small lots..............$2.15
Car load lots.............. 2.05

NETTING—POULTRY.

Galvanized Before Weaving.80&20
" After Weaving...80&15
Cut Pieces..............65&5%

NIPPERS.

End Cutting.
P. S. & W. Co..............40&5%
Stubb's Pattern..............40&10&5%
Hoof.
Heller's..............40&5%
P. S. & W. Co..............40&10%
V. & B..............40-5%

NOZZLES.

Hose.
Genuine Boston.......per doz $3 40
Genuine Gem.............. " 3 60
Magic.............. " 3 60

NUTS—HOT PRESSED.

Square Blank.

In.	¼	⅜	½	⅝	¾	⅞	1
Lb.	7½c	5¼c	4⅞c	4⅝c	4½c	4¼c	4¼c

Square Tapped.

In.	¼	⅜	½	⅝	¾
Lb.	14c	9½c	7¼c	6½c	6¼c

OILS.

Linseed, Pure boiled......per gal 36c
" " raw......... " 35c

OILERS.

Chase Pattern.
Brass and Copper..............35%
Zinc..............60%
Engineers'.
Cannon..............10%
Tin..............per doz $2 50@$3 00
Machine.
Ajax..............per doz $0 80
Copper Plated Steel... " 1 50
Malleable Iron..............40&10&5%
Tin..............per doz 55c@65c

OPENERS.

Box, in.	10	12	14
Flat ...per doz	$2 85	$2 60	$4 15
Round.. "	2 10	2 25	2 "

Can.
American..............per doz $0 2"
Delmonico.............. " 1 35
Never Slip.............. " 0 45
Perfect.............. " 60

Tip Top.............. " 0 84
Crate, V & B.............. " 5 75

OUTFITS—COBBLING.

Combination..............per doz $11 50
Economical.............. " 4 90
Family.............. " 10 00

PADLOCKS.

Standard Wrought..............70&10&5%
Champion..............50%
Eureka..............40&10&5%
Yale..............60&5%

PAILS.

Cream.
14-qt., Without Ga....per doz $2 75
20-qt., " " .... " 3 25
20-qt., With Gauge.... " 4 20
Sap, 10-qt., Galvanized, $1 60; 12-qt., Galvanized, $1 85 per doz.
Stock, Galvanized.

Quarts.	14	16	18	20
Per doz...	$3 75	$4 00	$4 65	$5 25

Water, Galvd, qts. 10 12 14
Per doz.......... $1 75 $2 00 $2 35
Wood.
Cable, 2-Hoop, $1 70; 3-Hoop, $1 90 per doz.
Cedar, 3-Hoop, $2 85 per doz.
Standard, 2-Hoop, $1 55: 3-Hoop, $1 75 per doz.

PANS.

Dripping..............50&10&5%
Fry, Common..............60&10&5%
Acme..............66⅔&5%
Roasting.
Brownie..............Each 30c@37c
L. & H.............. " 58c@80c

PAPER.

Building.
Plain..............per 100 lbs $1 15
Tarred.............. " 1 25
Tarred Felt.............. " 1 80
Diamond A, Red Rosin.pr roll 0 60
Leader, Red Rosin..... " 0 50
Sand and Emery.
Ajax..............50&10%
B. & A..............50 & 5%
Wrapping.
Grecian Express..............per lb 3¾c
Rag.............. " 2½c

PARERS.

Apple.
Bay State..............per doz $13 00
Reading.............. " 6 75
Turntable.............. " 6 00
White Mountain.............. " 5 25
Potato.
Goodsell's Saratoga..per doz. $6 50
White Mountain...... " 6 00

PICKS

Adze Eye Ore..............60&5%
Drifting and Poll Picks..............60&10%
Ajax Railroad..............50&5%
Extra Railroad..............60&10%
Surface..............60&10%

PINCHERS.

Carpenters', wrt. iron, pol. steel jaws..............30%
Blacksmiths'..............50%
P. S. & W..............40&10&5%

PINS.

Clothes.
Common..............per gr..$0 12
Hoyt's.............. " .. 30
U. S.............. " .. 70
Picket.
Fluted..............per doz..$0 80
Round.............. " .. 1 75
Spiral.............. " .. 1 90

PIPE.

Conductor.	Nested	Not nested
Eastern, A...	75&7½%	75&2½%
Eastern, B.	75&10&2½%	75&7½%
Central....	75&7½%	75%
Southwst'n..	70-&7½%	70&2½%
Texas........	70&7½%	70&2½%
Mo. River....	70&7½%	75%
Southern......	70&10%	70&5%

Lead.
Full coils..............per lb..$0 6
Cut " .... " .. 6¼
Stove.

Acme—In.	5	6	7
Smooth, per jt.	10½c	10½c	12½c
Planished, " ..	32c	32c	43 c
Peerless--Smooth..	8½c	9c	11½c
Polished.	16c	18c	22 c
Planished	28c	31c	40 c
Made-up—In.	5	6	7
Smooth..........	8½c	9c	12 c

7 to 6 in. Smooth Tapers, pr jt..14c
6 in. Smooth T's.............. " ..30c
7 to 6 in. Planished Tapers......45c
Wrought Iron Gas Pipe.
⅛-in., black..............discount, 60%
¼ " .... " 63%
¾-in. to 4-in , black.... " 69%
4½ " 6 " .... " 66%
7 " 12 " .... " 64%
⅛ " galvanized " 48%
¼ " " " 50%
¾ " to 4 " " 56%
4½ " " 6 " " 52½%
7 " " 12 " " 50%

PLANES.

Ohio..............60&5%
Stanley Planes, new list..30%@30&5%
Bailey Planes..............35%
Sandusky..............30%

PLANTERS.

Corn,
Monitor..............per doz..$7 75
Triumph.............. " .. 6 00
Potato
Acme..............per doz.. $6 25
Challenge.............. " .. 10 75
Fencing.
Cronk's..............per doz..$9 25
Farmers' Choice.... " .. 8 75
Russell's.............. " .. 8 65
Flat and Round Nose.
Bernard's..............30%
German..............50%
Lodi..............40%
Paragon..............40&10%
P. S. & W. Co..............60%

Gas—In.	8	10	12
Per doz......	$3.10	$4.00	$4.90

PLIERS.

Button's--In.	4½	6	8	10
Per doz.....	$2.60	$3.10	$3.90	$5.2

Button' Pattern.

In.	4½	6	8	10
Per doz.. ..	$2.25	$2.50	$2.45	$4.4

Cutting.
Bernard's..............30%
Cronk's Impr'vd Button Pliers.75%
Cronk's Linemans No. 40..............40%
Cronk's Stubbs Pattern.... 50%
Cronk's No. 1..............60&10%
Cronk's Staple Puller Pliers..$3 00
Lodi..............60&10&5%
4 Tube, revolving.... " .. 5 2
Tinners'.
Hollow..............
Solid..............each..5½c

PLUMBS AND LEVELS.

Common..............75%@75&10%
Cook's..............40%
Davis' Iron..............30%
Davis' Inclinometer..............30%
Stanley's

Nos.	00S	0S	2S	3S
Per doz..	$4.50	$5.20	$7.60	$8.65
Nos.	30	25	50	35
Per doz.	$13,00	$17.50	$17.50	$12.35

POINTS. Discount

Drive Well Points..............80&10&5%

POKERS--STOVE.

Wr't Iron, str't or bent, per doz.$0 50
Wr't Iron, wood hand'ls " 75
Nickel pl'td. coil hdl's.. " 70

POKES--ANIMAL.

American........per doz..............$2 60
Brown's, wr't steel " ..$5 25@$6 25
Eagle.............. " $4 25
Success.............. " 2 60

POLES--FISHING.

Bamboo

Ft.	12	14	16	18	20
Pr 100..	$2.75	$3.40	$4.75	$6.00	$7.75

POLISH.

Metal.
Pride of the Bar..... " .. 1 60
Putz Cream.

Pts.	1-6	¼	½
Per doz......	$0.84	$1.25	$1.80
Pts.	1	2	4	8
Per doz.	$3.60	$6.00	$9.00	$18.00

White Silk, half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine

Pts.	1-6	½	1	2
Per doz...	$0.62	$1.30	$2.15	$3.00

Shoe.
M. D. C..............per doz..36c@50c
F. C. O.............. " 40c
T. M.............. " 50c@$1 25
Imperial..............per gr..............$5 00
Stove.
Black Eagle, 1 lb cans, pr gr..$15 00
Black Silk—
5 lb. pail.............. 70c
Paste, 5 oz. cans per doz.....$1.00
Paste, ½ lb cans, per doz... 1.00
Black and Japanned—
Liquid, ½ pint cans per doz. 1.00
Liquid, 6 oz. cans per doz.... 75c
Steel Range Gloss per doz... 1.75
Blackene, 1 lb cans....pr gr.. 18 00
Black Jack. ¼ lb cans. " .. 9 00
Dixon's Carb. of Iron. " .. 5 75
Nickel Plate.............. " .. 4 50

POPPERS, CORN.

Round or Square, 1 qt. per doz., 85@95c
Square, 1½ qt..............per doz., $1 00
Square, 2 qt..............per doz., 1 25
1 qt. reversible......per doz., 1 50

POTS—FIRE.

Bernz..............each..$3 85
Clayton & Lambert's, each, $4 75@$6 25
Gate City..............each.. 6 25
Gem.............. " .. 6 75

POWDER.

See Ammunition.

PRESSES—FRUIT AND JELLY.

Enterprise Manufacturing Co... 25%
Henis..............per doz. $2 10

PRUNERS.

Disston's Pole..........per doz..$7 50
Henry's Improved..per doz..65&10%
Water's Improved. " 70, 10&5%

PULLERS.

Cork.
Modern..............each..$2 60
Quick and Easy........ " .. 2 90
Nail.
Giant..........per doz..$9 00@10 50
Giant Pattern. " .. 6 00
Tack--Giant.... " .. 60

PULLEYS.

Awning--Jap'd.......40&5% to 35&5%
Clothes Line..............20&10%
Hay Fork.
Iron Wheel, 5 in......per doz..$1 85
Wood Wheel, 6 in... " .. 1 8.
Wood Wheel, 6 in... pass knot.......... " .. 2 25
Hot House--Jap'd..............30&5%
Screw....... " ....30&5%
Side......... " ....30&5%
Sash.
Chicago..............per doz..$0 29
Clark's.............. " .. 43
Common Sense, 2 in.. " .. 27
" Pattern, 2 in.. " .. 22
Empire.............. " .. 24
Ideal.............. " .. 24
Grand Rapids, No. 17 " .. 24
" " No 11 " .. 25

PUMPS

Pitcher Spout.

Nos.	1	2	3	4
Each.......	$0.9	$1.05	$1.15	$1.40

PLATES--TIN.

See Metals in Column 1.

Spray.
Blizzard..............per doz..$14 25
Cyclone, tin.............. " .. 3 90
" copper..... " .. 6 75
Daisy.............. " .. 8 75
Little Giant..............each.. 2 40

PUNCHES.

Conductors', No. 22....per doz..$2 50
Machine..............per lb.. 19
Saddlers'.
Common..........per doz..60c@70c
Good.............. " ..72c@84c
Spring.
1 Tube..............per doz. $9 25

PUTTY.

In Bladders.
Strictly pure......per 100 lbs. $2 25
Commercial...... " " 2 10

RAIL.

Barn Door.
Light Wrought.. ......per ft. 3c
Safety.............. " 4½c
Single Flange.............. " 1¾c
Smith's Wro't Bracket—plain 3¼c
Smith's Special..............4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel..............30%
Smith's Milled Steel..............4½c
Sliding Door.
Painted iron..............per ft. 4½c
Bronzed wr't iron....... " 8½c

RAKES.

Coal or Road..............per doz. $6.50
Garden.
Cronk's Champion..............70%
Cronk's Victor..............75%
Steel, braced..............75&15%
Steel, bow..............70%
Malleable iron, heavy..............70%
Hay—Wood.......per doz. $1 40@2 00
Lawn—Wood.
Common..............per doz. $2 50
Automatic.............. " 6 00
New Lawn Queen.... " 3 60
Jumbo, 36 teeth...... " 6 50

RASPS—See Files.

REGISTERS.

List July 1, 1902.
Black and White Japanned .70 to 75%
Nickel Plated..............70 to 75%
Electroplated, Brass, Bronze or Copper..............70&75%

RINGS

and Ringers—Hog.
Blair's Rings..............per doz. 60c
Blair's Ringers.............. " 84c
Brown's Rings.............. " 68c
Brown's Ringers.............. " 90c
Champion Rings.............. " $2 25
Champion Ringers.............. " 1 70
Hill's Rings.............. " 45c
Hill's Ringers.............. " 70c@95c
Mazor Rings.............. " 80c
Mazor Ringers.............. " $1 15
Perfect Rings.............. " 84c
Perfect Ringers.............. " $1 05
Wolverine Rings.............. " 1 60
Wolverine Ringers.... " 70c
Bull.
Copper, 2½-in. 3-in.
per doz.............. $1 35 $1 76
Steel........per doz. 95 1 05
Steel, Nickel Pl't'd, 2½-in., doz. 1 25
Rea's Self Piercing..............$1.05
Fruit Jar—White..............per lb. 20c
Key.
Split, round..............per doz. 1
Split, square.............. " 22c
Ball, round.............. " 22c

RIVETS.

and Burrs.
Copper Belt..............50&10&5%
Coppered Iron..............75%
Tinners'..............66⅔@60%
Hame..............per lb.
Slotted Clinch........per doz. 70c@75c
Tubular—Nos. 1 and 2, assorted sizes..............per doz. 60c

ROPE.

Per lb.
Manila, 7-16 inch diameter and larger.............. 11¾c
Sisal. 7-16 in. and larger........ 8½c
Cotton.
¼ and 5-16-in. on reels...per lb. 12c
¼ and 5-16-in. in coils... " 12½

RULES.

Boxwood..............60%
Ivory..............35&5%

SASH WEIGHTS.

Per ton, f.o.b. Chicago..............$30.00

SAWS.

Back.
Disston's..............25&7½%
Jackson's..............25&7½%
Butchers'—Disston's..............25&7½%
Circular.
Disston's..............50%
Hiles'..............50-10%
Compass.
Common........per doz. $1 25@1 60
Disston's..............25&7½%
Cross-Cut.
Atkin's..............40%
Disston's..............40&10% &50%
Pocahontas Bit..........per ft. 28c
Pocahontas, Blued...... " 41c
Dehorning.
Atkins'..............per doz. $5 50
Disston's.............. " 5 75
Hack.
Disston's..............33⅓%
Keystone..............33⅓%
Sterling Hack Saw Blades..............33⅓%
Sterling Hack Saw Frames..............33⅓%

SAWS—CONTINUED.

Hand and Rip.
Brown's .....30&7½¢
Disston's No. 7 .....30&7½¢
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 .....25&7½¢
Gorham's Comb .....30&7½¢
Keystone .....30&7½¢
Sam Sickles', hand...per doz. $4 20
"I Will," hand ..... " 5 75
"I Will," rip ..... " 6 75
"U. S. A." hand ..... " 12 25
"U. S. A." rip ..... " 14 25

Keyhole—Disston's .....25&7½¢

Kitchen.
Sterling .....25¢

One Man .....50¢

Panel.
Brown's .....30&7½¢
Disston's No. 7 .....30&7½¢
Disston's Nos. D8 and 12, D100 and 112 .....25&7½¢
"I Will" .....40¢
"U. S. A." .....40&10&5¢

Pruning.
Avery's Duplex .....25&7½¢
Brown's .....25&7½¢
Disston's .....25&7½¢

Wood.
Common .....per doz. $4 50
Handy ..... " 7 50
Happy Medium ..... " 7 00
Wood Sawyers' Delight " 8 25

SAW SETS.

Common Lever .....per doz. $ 1.20
Stillman's Lever .....per doz. 1.20
Leach's .....per doz. 5.00
Nash's .....per doz. 4.20
Monarch .....per doz. 6.50
Aikin's Pattern .....per doz. 3.50

SAW FRAMES.

Common, plain .....per doz. $1 20
" painted ..... " 1 60

Counter. SCALES.
Fairbank's Standard .....30, 10&5¢
Hatch's .....per doz. $21 50
Little Detective, 1 2 3
Each $3 00 2 25 2 10
No. 1 Tea .....per doz. 7 75
Union Platform .....each 2 40
Pelouze .....30¢
Turnbull's Market .....50¢

Platform.
Common, 600 800 1000
Each $6 20 8 75 9 50
Chicago Standard .....30 to 33⅓¢
Fairbank's Standard .....40¢
Osgood .....50¢

SCOOPS.

Ames .....10&10¢

Eastern Pattern. Socket Strap.
Nos. 2 3 4 5 6
Per doz. $7.00 7.25 7.50 7.75 8.00
Nos. 7 8 9 10 12
Per doz. $8.25 8.50 8.75 9.00 9.50

Western Pattern. Socket Strap.
Nos. 1 2 3 4 5
Per doz. $7.00 7.25 7.50 7.75 8.00

Ajax. Eastern Pattern,
Nos 2 3 4 5
Per doz. $5.25 5.50 5.75 6.00
Nos. 6 7 8 9
Per doz. $6.25 6.50 6.75 7.00

Ajax. Eastern Pattern, extra heavy.
Nos. 3 5 6 7
Per doz. $7.25 7.75 8.00 8.25

Ajax. Western Pattern,
Nos. 4 5 6 7
Per doz. $5.75 6.00 6.25 6.50
Nos. 8 9 10 12
Per doz. $6.75 7.00 7.25 7.75

SCRAPERS.

Box.
Stanley's Adjustable, per doz. $3 60
Triangular ..... " 2 50

Cabinet.
Ajax .....per doz. $2 25
Cast Steel ..... " 65c@75c
Stanley's No. 80 ..... " $8 40

Road.
Cubic ft. 7 5 3
Without runners, ea. $5.00 4.75 4.50
With runners .... " 5.25 5.00 4.75

SCREWS.

Bench.
Iron .....30¢
Wood, white maple...per doz. $3 60

Hand—Wood .....20¢

Hand Rail .....70&10¢

Jack .....75&5¢

Lag or Coach, ...80&5¢

Saw—Centennial.
Nos. 1 2 3 4
Per doz. 22c 25c 32c 36c

Wood.
F. H. Bright Steel ....87½, 10&10¢
R. H. Blued Steel .....85&5¢
F. H Jap'd Steel .....82½&5¢
F. H. Brass .....85&5¢
R. H. Brass .....80&5¢
R. H. Nickel Plated .....75¢

SCYTHES.

Clipper, grain .....per doz. $7 75
Dutchman, grass ..... " 5 25
Golden Clipper, grass. " 5 00
U. S. A., grass ..... " 5 75

SETS.

Nail.
Round, common .....per doz. $0 33
Square " ..... " 42
Octagon " ..... " 33
Square, Buck Bros. " 1 25
Cup Point, knurled, pr doz. 70c@$1.00

Steel.
Farmers' .....per doz. $1 45
Tinners' .....50&10¢

Saw.
Aiken's Pattern .....per doz. $3 50
Common Lever ..... " 1 20
Disston's Monarch ... " 6 50
" X Cut ..... " 11 75
German ..... " 1 35
Morrill's Old Style ... " 5 00
" Pattern .... " 4 50
Leach's ..... " 4 80
Nash's Hand ..... " 4 00
" X Cut ..... " 5 50
Stillman's Lever ..... " 1 30
" X Cut ..... " 2 50

SHARPENERS—SKATE.

Diamond ..... per doz. $1 60

SHAVES—SPOKE.

Iron .....per doz. $1 35@$2 75
Wood ..... " 2 75@ 4 75
Bailey's .....50&5¢
Goodell's .....15¢
Stanley's Universal .....30&5¢

Pruning. SHEARS.
Buckeye, No. 1 .....per doz. $6 50
" No. 2 ..... " 8 50
California Pat., 9 in. " 4 25
" 10 in. " 5 00
Draw Cut, No. 3 ..... " 15 50
" No. 4 ..... " 18 50
Henry's Pat. 0 01 14 012
Per doz. $1.90 $2.50 $3.15 $3.50
Star .....per doz. $4 75

Sheep—No. BBA.
6 in. 6½ in. 7 in.
Reg. Grip. $11.25 $11.50 $12.00 doz.
Nar. Grip. 11.25 12.00 13.00

Tinners'—See Snips.

SHEAVES—SLIDING DOOR.
In. 3 4 5
Common..Per set. $0.42 $0.48 $0.70
Hatfield's " .. .75 1.00 1.60

SHELLERS—CORN.

Union .....per doz. $7 25

SHOT—See Ammunition.

SHOVELS AND SPADES.

Drain.
Iwan's Perfection .....50¢

Railroad, Etc.
Gold Hibbard's .....per doz. $9 25
C. H. Conovers' ..... " 7 75
Beckwith's ..... " 7 75
Hickory ..... " 6 25
Greenleaf's ..... " 5 75
Columbus ..... " 5 00
Ames' new list .....Discount 12½¢

Coal.
No. 2 Ajax .....per doz. $5 25
No. 4 Golds ..... " 6 25
Ames' new list .....Discount 12½¢

SIEVES.

Champion .....per doz. $ .90
Hunter's Genuine ..... " 1.10
" Imitation ..... " .90
Tin Rim, 16 mesh plain wire" 1.35
Wood " 16 mesh plain wire" .80

SINKS.

Cast Iron.
Painted .....50&5¢
Enameled, White .....60-10&5¢

Wrought Steel.
Painted, new list .....40-10&5¢

SLEDGES—See Hammers.

SNAPS—HARNESS.

Champion .....65¢
German Pattern .....30&5¢
Judd's Pattern .....60&10¢@70¢

SNATHS.

Double Ring, Bush .....per doz. $6 75
Patent Loop " ..... " 7 30
" " Grass ..... " 6 50

SNIPS—TINNERS'.

Hernisch's .....40&5¢
National .....40&5¢
P. S. & W. Co.'s .....25&5¢

SOLDER.
See Metals, Column 1

SPRINGS—DOOR.

Perfect. Nos. 1 2 3 4
Per doz. 33c 38c 45c 48c

Reliance, Light $1.40, Heavy $2.20 doz.

Star ..... " .90, " 1.20 "

Torrey's .....per doz. $1 35

Warner's— No. 1 No. 2
Per doz. 72c $1 45

SQUARES

Steel and Iron .....70¢
(Add for Bluing, $2.50 per doz., net.)

Mitre—Stanley's No. 12 .....40¢

Try.
Stanley's No. 20, new list ...30&10¢
" Nos. 12 and 14 .....40¢

Try and Bevel—Stanley's .....40&5¢

Try and Miter.
Fox's .....per doz. $7 25
Winterbottom's .....50¢

SQUEEZERS—LEMON.

Common Wood .....per doz. $0 72
Porcelain Lined, wood. " 1 20
Boss, tinned iron ..... " 84
Pearl, nickel plated ... " 1 30
Star " " ..... " 1 60
Little Giant, tin'd iron " 4 25
King ..... " 2 50
Drum ..... " 4 50

STAPLES.

Blind—Barbed .....per lb. 9½@10c

Butter Tub ..... " 8@8½c

Fence, less than carload.
Polished .....per 100 lb. $2 40
Galvanized ..... " 2 80

Netting—Galvanized .....per keg 3 60

Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples ..... 85-10&5¢
Extra heavy ..... 75&10¢

STEELYARDS.
Discount 25¢

STONES.

Axe.
Hindostan .....per lb. 5¾@7c
More Grit ..... " 9½c
Washita ..... " 10½c

Emery .....60¢@60&5¢

Oil—Unmounted.
Arkansas Hard .....per lb. $2 00
Arkansas Soft ..... " 1 15
Hindostan ..... " 6¼@6¾
Lily White ..... per lb 43c
Queer Creek ..... " 14½c
Ouachita ..... " 36c
Washita ..... " 20c

Sythe.
Black Diamond .....per gro. $7 75
Clear Grit ..... " 4 25
Gem Corundum ..... " 7 50
Green Mountain ..... " 4 25
La Mollie ..... " 7 00
White Mountain .....per gro. 6 50
Willoughby Lake .... " 6 25
Red End ..... " 3 15

STOPS—BENCH.

Hotchkiss' .....per doz. $3 60

STOPPERS—FLUE.

Common .....per doz. 42c
Crown ..... " 48c
Gem, flat, painted ..... " 72c
Gem, cor'd, decorated .... " 63c
Kirch's ..... " $1 20
Peerless ..... " 72c
Skinner's Common Sense " 95c

STRAPS.

Scoop .....per doz. prs. $1 80
Skate ..... " " 60@70c

Carpet. STRETCHERS.
Bullard's .....per doz. $3 90
Excelsior ..... " 5 50
Malleable Iron ..... " 70
Perfection ..... " 6 00
King ..... " 4 50

Wire.
N. S. Elwood's .....per doz. $5 75
O. S. Elwood's ..... " 5 75
Little Giant ..... " 5 50
Star Lever ..... " 6 25
Star Tackle Block .... " 9 25
Warner's ..... " 6 25

SWIVELS.

Malleable Iron .....per lb. 06c
Wrought Steel .....per gro. $4 50

TACKS.

American Cut .....90&5¢
American Wire .....85&25&10¢
Bill Posters Cut ..... 90&40¢
Blued Carpet .....90&15¢
Tinned Carpet .....90&15¢
Gimp .....90&30&10¢
Upholsters' Cut .....90&40&5¢
Upholsters' Wire .....90&25¢
Double Pointed .....90&20¢
Copper .....per lb 27c
Canvas Nails .....75&5¢
Clout Nails .....75&10&5¢
Hungarian Nails .....80&5¢

TAPES—MEASURING.

Asses' Skin .....40&10¢
Bend Leather .....25¢
Patent Leather .....25¢
Lufkin's Steel .....30¢
Lufkins Metallic .....30¢

TENTS AND PAULINS.

Wall Tents .....50-15¢
Wedge Tents .....40-10¢
Paulins .....45-5¢
Wagon Covers .....45-5¢

THERMOMETERS.

Tin Case .....per doz., 95c@$1 25
Wood Back ..... " $1 75@ 9 00
Glass ..... " 15 50

Base. TIES.
Single Loop .....50&10¢
All other kinds .....70¢

Cow—See "Chains."

TONGS.

Crimping—Packham's ...per pair 50c

Gutter—P. S. & W. Co.'s .....15&10¢

Pipe—Brown's .....50¢

Roofing—P. S. & W. Co.'s .....15&10¢

TOOLS—SAW.

Atkin's Dexter .....per doz. $4 25
Atkin's Excelsior ..... " 6 25
Disston's Universal .....40¢
McDonald's .....33⅓¢

Game. TRAPS.
Newhouse .....50¢
New Victor .....75-10¢

Mole—Reddicks .....per doz. $5 75

Mouse and Rat.
Wood Choker .....per hole 11c
Tin Choker ..... " 9c
Delusion .....per doz. 85c
Imitation Sight, Rat .. " 80c
Marty Rat ..... " $6 75
Marty Rat, Imitation .. " 3 75
Marty Mouse ..... " 3 15
Marty Mouse, Imitation " 2 10
French Automatic .... each $3 60

Fly.
Balloon .....per doz. $1 10
Harper's ..... " 1 25

Brick. TROWELS.
Standard .....30¢
Brade's .....10&7½¢
Disston's .....35¢
Rose's .....35¢

Plasterers'.
Standard .....33⅓¢
Disston's .....30¢
W. & McP .....35¢

TRUCKS.

Bags .....each $1 70
Handy ..... " 1 50
Warehouse .....60&5¢

No. 1 2 3
Half Ironed $2.60 $3.40 $5.00
Full Ironed 3.90 5.75 6.75

TUBS-WASH.
No. 3 2 1 Extra large

Standard, per doz. $5.25 6.25 7.25 9.75
Dowel .... " 5.60 6.60 7.50 10.00
Cedar .... " 6.50 7.50 8.25
Indurated. " 7.20 7.95 9.45 11.70

Galvanized.
No. 1 2 3
Per doz $5.25 5.75 6.50

TWINE. per lb.
3-ply Cotton Wrapping 19c
4 " " " 19½c
4 " " Extra Wrapping. 22c
4 " " Hvy. Wrap'g. 23c
4 " " Wrapping on tubes. 25c
3 " " " cones. 21c
4 " " " " 22c
India Hemp, ¼-lb. balls 18c
" " ½-lb. " 17c
" " ¼-lb. " ...doz. 65c
2-ply " ¼-lb. " 11½c
3 " " ½-lb. " 11½c
Jute Wrapping, ½-lb. balls 11½c
Jute Wool, 1-lb. balls 6c
Stagging, ¼-lb. ball, size 21 .... 22c
" ¼-lb. ball, " 24 .... 21c
" ¼-lb. ball, " 27 .... 21c
Bagging, ¼-lb. ball 22c
3-ply "B" in hanks 19c
4 " "B" " " 19c
3 " "A" " " 29c
3 " Silver Finish, in hanks 39c

Fodder or Lath.
130-strand 8c
200-strand 8½c

VISES.

Bonney's .....30¢
Cheney's .....20¢
Parker's Oval Slide .....50@50&10¢
Parker's Parallel .....15@20¢
Parker's Victor .....10¢
Parker's Combination .....50&10¢
Solid Box .....60&5¢
Adam's Mechanics' .....each $3 50
Williamson Universal ..... 20¢

WARE.

Cast-Iron Hollow.
Ground .....40, 10&2½¢
Unground .....50, 10&2½¢
Extra Finished .....40¢
White Enameled .....40&5¢
Muslin Kettles .....65¢

Enameled.
Adamant, one coat, 70&10¢@75&10¢
The manufacturers divide this ware into two classes, which take different discounts, noted above.
Chrysolite, three coat .....40&5¢

WEDGES.

Axe .....per doz. 30c

Galling .....per lb. 10½c

Saw ..... " .. 8½c

Wood Choppers.
Lake Superior and Oregon, Pat .....per lb. 9½c
Reg. Pattern, Steel ... " .03-½c
Truckee " " ... " .03-½c

WEIGHTS.

Hitching .....per lb. 2½c

Sash—F.O.B. Chicago..pr ton. $22.50

WHEEL BARROWS.

Common Railroad ....per doz. $16 00
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Santiago Steel Tray .. " .. 26 50
No. 04 Steel Dirt ... " .. 52 00
No. 04½ " " ... " .. 56 00

WHEELS.

Corundum .....70&10&5
Emery .....75&5¢

Well. In. 8 10 12 14
Per doz. ... $1.90 $2.20 $3.00 $5.50

WIRE.
Barbed. Painted. Galv'd.
Carloads ...pr 100 lbs. $2.50 $2.65
Less than car " .. 2.40 2.70

Brass.
In coils ..... 20¢
In 1 lb. spools, new list ..... 50&10¢

Broom—Tinned ..... 60&10&10&10¢

Cable—Same price as Barbed Wire.

Copper.
In coils .....20&10¢ 33⅓¢
In 1 lb. spools, new list ..... 50&10¢

Fence—Smooth.
Nos. 6 to 9, Annealed, pr 100 lbs. $2.00
Nos. 6 to 9, Galv'd ... " 2.30

Hair—New list .....50&10¢

Market.
Bright, full bdles .....70&10¢
Bright, broken bdles .....70¢
Coppered, full bdles .....70¢
Coppered, broken bdles ....65&10¢
Tinned, full bdles .....70&5¢
Tinned, broken bdles .....65&10¢

Picture.
In coils .....80¢@80&10¢
In 5 lb. spools .....per lb. 25c

Plain—Small lots $2.00
Car lots 1.95
Small spools 5c per hundred higher

WRENCHES.

Acme Standard .....60¢
Alligator .....65&5¢
Always Ready .....40&10&5¢
Bemis & Call .....40¢
Coe's Standard .....40&10¢
Girard's Agricultural .....80¢
P. S. & W. Co.'s Agricultural ....75¢
" " Knife H'dle..50&5¢
Wescott's "S" .....33⅓¢
Malleable "S" .....per lb. 05½c
Malleable .....per lb. 05½c
Stillson Pipe .....60&5¢
Trimo " .....60¢

WRINGERS.

Clothes.
Nos. 23&110, Guarantee, pr doz. $36 00
No. 150, Sunshine ..... " 18 00
No. 130, Mendota ..... " 18 00
No. 12, Success ..... " 16 00
Blue Bell, Ball Bear'g. " 25 00
No. D 110, Domestic ... " 22 50
No. E 200, Empress ... " 25 50
No. 122, Bicycle Ball-bearing ..... " 27 00
No. 123, Swan ..... " 27 00

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

For Sale or Trade—A clean stock of hardware, furniture and shoes, with building 24x82.; only hardware in town; fine farming country. R. R. junction town.; S. W. Minnesota. Address "Trade." Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 2

For Sale—A first-class hardware store and tin shop; located in a nice town, surrounded by a rich farming country. Will give good reasons for selling. A rare chance. Address "Hardware." Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 2

Wanted—I would like to buy an interest in a hardware store in a good, thriving locality, carrying a stock of from $4,000 to $5,000. Address Box 39, Albion, Neb. 2

For Sale—Land in Morton county or Ward county, N. Dak. Will trade part or all for hardware stock in Minnesota, Iowa or Wisconsin. Address Box 315, Alden, Minn. 2

For Sale—1 beading machine, P. & S.; 1 30-in. forming roll, P. & S. make; 1 pipe crimping machine; 1 ½-in. gutter beader. All almost as good as new. Will take $20 for the outfit f. o. b. cars here. Address W. W. Anderson, Atwood, Ill. 2

TINNERS' TOOLS.

First-class tin and sheet metal worker desires steady position; age 25 years; sober and reliable; New Mexico or Arizona preferred. Address Box 611, El Paso, Tex. 25

For Sale—A set of tinners' tools in good serviceable condition, about 50 pieces, for $100. Will send list and description on application. L. Case & Co., Prairie du Chien, Wis. 1

HELP WANTED.

Wanted—A hardware stock from $4,000 to $5,000, for spot cash, in Minnesota, Iowa, North or South Dakota. Must have good, clean stock. Give full description of town and nationality; also size, etc. Send stamped envelope for reply. Address J. L., 314 Bradley Bldg., St. Paul, Minn. 2

Wanted—At once, first-class tinner and furnace man to act as foreman. Must be able to figure tin and galvanized iron work from the plans and thoroughly understand furnace work. Steady job the year round. Must have good references. Apply Churchill-Hemenway Co., Galesburg, Ill. 2

Wanted—A retail hardware salesman familiar with building hardware and tools. Address, with reference, experience, salary expected, "H. & H. Co.," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 2

Wanted At Once—First-class tinner and clerk; steady job, good wages; state wages and give reference; don't answer this unless you mean business and want steady job. Don't want a man for a few months. Want him, if satisfactory, years. Thos. Rawlings, Wakefield, Neb. 2

Wanted—By Feb. or Mar. 1, a strictly sober man, who has a fair knowledge of both tinning and plumbing and willing to clerk in store when not busy in shop. To the right man we will pay good wages and give steady work permanently if suited. Curtis Hdw. Co., Paonia, Colo. 2

Wanted—A tinner, first-class man; steady work. Josten Hardware Co., La Crosse, Wis. 2

Wanted—First-class stove pattern filer and fitter. Steady work guaranteed. Apply at once stating experience and wages expected. The James Stewart Mfg. Co., Woodstock, Ont., Canada. 2

Wanted—Good tinner, capable of doing furnace work, and an all round man in country town. Steady job to right man. Married preferred. Give references. Box 246, Kenyon, Minn. 2

SITUATIONS WANTED.

Situation Wanted—By a first-class tinner of twenty years' experience; am a practical furnace man; do plumbing; hot water or anything that comes my way; am temperate and married. State wages per week the year round. Address L. B. 289, Dodgeville, Wis. 2

Position Wanted—As foundry foreman by man of 37; fifteen years' experience in stove and jobbing work; first-class references from employer and foundrymen. Address L. H., care The American Artisan, 69 Dearborn St., Chicago, Ill. 2

Open for a position as foreman of a range shop or on the road. I have had 22 years' experience in range business; I can make plan blue prints for hotel outfits. Address J. H. R., Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 2

Wanted—The management of a stock of hardware on a per cent basis, 13 years' experience; age 36; best of references as to character and ability. Address W. W. Anderson, Atwood, Ill. 2

Wanted—Position in hardware store by competent man not afraid of work; has had years of experience in the business; understands plumbing and heating; can keep books; best of references furnished if desired. Address "Box S.," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 2

SPECIAL NOTICES.

Wanted-An Experienced Stove Man, capable of managing a stove manufacturing plant, capacity about fifty moulders. Would want one with money to invest to take an interest in the business. Good opportunity for the right man. Address "INVEST," care The American Artisan, 69 Dearborn Street, Chicago, Ill. 24

WANTED.

Stove salesmen for Iowa, South Dakota and Southern Minnesota. Only experienced men wanted. Apply by letter.

BERGSTROM BROS. & CO., Neenah, Wis.

WANTED.

Advertiser is practical, progressive up-to-date salesman on hot air furnaces, with wide range of experience in estimating and installing work; thoroughly capable, energetic and ambitious, is now open to consider proposition as correspondent, local or road salesman, with some broad-gauged substantial concern handling a strictly reliable up-to-date line of goods. Address GOOD SALESMAN, care AMERICAN ARTISAN, Chicago, Ill.

WANTED

—Salesman for Iowa; also for Indiana and part of Illinois and Ohio.

BONNET-NANCE STOVE CO., Chicago Heights, Ill. 24

WANTED.

Fifteen more Traveling Salesmen for central, western territory tributary to Chicago, to sell a complete general line of hardware, cutlery and tools.

TROUT HARDWARE CO., - Chicago, Ill.

WANTED

—First-class furnace salesman to handle a line of high-grade furnaces in the western states on a commission basis.

The Forrest City Foundry & Mfg. Co.
Winslow, Elm, Sycamore and Main Sts., CLEVELAND, OHIO

SALESMEN WANTED

that call on Hardware Trade in Wisconsin, Illinois and Iowa to sell our line on commission basis.

COLUMBIA MFG. CO. - Antigo, Wis.

SALESMAN WANTED.

For Illinois, Minnesota, Iowa, and Nebraska. A complete line of stoves and furnaces. Address "Box A-Z." Care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 23

FOR SALE.

Business established 30 years—best location in Chicago. Trade continually on the increase. General hardware, house furnishings and crockery, also tin shop, with fine jobbing trade. Must retire on account of health. Inventory $9,000.00 to $10,000.00. Address "**Box 207,**" care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 4-1

WANTED

A good talking proposition for side line, for Illinois, Missouri, Iowa, Kansas and the West, for 1904. References. Answer quick. Address "Hustler", care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill.

HELP WANTED.

A competent Tin-Plate and Sheet-Metal Salesman for territory between Chicago, Omaha and St. Paul. State experience and salary,

Address "**Box 63,**" care of The American Artisan, 69 Dearborn St., Chicago, Ill. 1-25

SALESMEN WANTED.

Three or four thoroughly first-class (only) furnace and boiler salesmen for territory between Ohio and Colorado. Address, "Box 175," care The American Artisan, 69 Dearborn St., Chicago. 4-23

WANTED

Salesmen to sell King Cream Separators on commission, side line, territory: Missouri, Eastern Iowa, and east of Mississippi River. Address

CHAS. A. VAN PELT, Nebraska City, Neb.

WANTED.

An expert sheet metal worker with long experience on the bench and as foreman desires position in Chicago. Best of references. Address "V" care The American Artisan, 69 Dearborn St., Chicago. 23

HAVE YOU WRITTEN

or our Free Sample Plate? If not, do so to-day. We teach everything in SHEET METAL PATTERN CUTTING. Our methods are so simple that anyone can learn. Actual work at the start.

HOME INDUSTRIAL SCHOOL
Milwaukee, Wis.

HAVE YOU

Secured Right to manufacture the CROWN VENTILATOR and CROWN CHIMNEY-JACK on Royalty to supply your territory? They are money makers for Sheet Iron Workers ever, where and a fine SIDE LINE for hardware men, especially the latter. No shop is too large nor too small to make money on our proposition. You have shop, tools, material, labor, everything necessary on hand already, and might as well get full profit from these fixed expenses. Make them earn more for you. No castings or parts have to be bought. We furnish patterns, instructions, electrotype for your letter and bill heads, advertising matter, etc., etc. We want distributing points in different parts of each state and can make it an object for you to supply the trade in your territory unless a branch is already established in your town. Write before your neighbor does.

CROWN VENTILATOR CO.
Milwaukee, Wis.

A RARE CHANCE

Wanted—Every stove dealer in the country to investigate our profit sharing plan—dividend guaranteed 7%—with good prospects of much larger returns. One of the leading malleable steel range builders is offering the retail stove merchant a chance to invest in what is to his interest and will pay a better dividend than government bonds. The men who act quick make money. **Investigate at once.** Address **E. S. H.,** care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

FOR SALE FOR CASH

One of the cleanest hardware stocks in the country. Fine city, fine farming country, good railroads. Does about Sixteen Thousand Dollars a year. Good shop in connection. Best of reasons for selling. This will bear investigation if you are looking for something good. City about 2,500. Write "G. B.," care *The American Artisan*, Chicago

Are You from Missouri?

That's good—because we can SHOW you the best investment in the stove line to-day and one of the best in any industry. We can't fill orders and need the money to enlarge. Our present dividends are big. Investigate this. Address "PAYER," care THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago.

FOR SALE.

My thoroughly equipped stove plant and job foundry, established 30 years, never changed hands; has local demand for entire output. Runs every day in the year; a money maker. I realize, because of conditions, I must sacrifice; 125 miles from Chicago; best of R. R. facilities. **GEO. W. STEWART, 108 Dearborn St., Chicago, Ill.** 2

BUY THE BEST CAN
For the Money.

Iron Clad Cans, all styles and sizes, Elgin, Irma and other patterns; also all kinds of Creamery and Dairy Supplies at bottom prices.

Write for prices and discounts and in what quantity.

EMIL TAEGE
Arlington Heights, Ill.
Box 28.

C. N. HOOPER, Dubuque, Ia.

VITREOUS ENAMELING
TECHNOLOGIST

Designs, builds and starts new plants. Improves quality and reduces the costs in those already established.

Jacob V. Steenbergen,
Boyden, Iowa, writes:
"I like your paper very much and would not be without it."

Will You Act as Our Agent?

We're looking for intelligent, hustling dealers, one in each locality in which we're not already represented, to help us supply the continually increasing demand for

Forest City Paint

To such we offer a most liberal proposition. It means selling the best paint: the assistance of plenty of forceful and attractive local advertising, and numerous personal helps such as will enable them to win the largest share of the paint trade in their locality, and increase their general business as well.

Write to-day for our Paint Proposition. It's mighty interesting. A postal will bring it.

The Forest City Paint and Varnish Company
Dept. H
Cleveland, Ohio

PATENTED.

FELT WEATHER STRIP

No more sticks and odds and ends and waste.

Felt Weather Strip is put up in Paste Board Boxes. Makes Shelf Goods. Nice profit, *and is better than* Wood and Rubber. Write us—*NOW.*

NORRIS & LORING HARDWARE CO., CEDAR RAPIDS, IA.

COLORS AND SPECIFICATIONS
(ILLUSTRATED)
PROTECTIVE PAINT FOR CONSTRUCTION AND MAINTENANCE OF STEEL AND IRON WORK.
PUBLISHED FOR FREE DISTRIBUTION BY THE
Joseph Dixon Crucible Co., Jersey City, U.S.A.

J. J. SUCHANEK, Preston, Minn., writes:
"The American Artisan is one of the best papers of its kind that I know of, and I expect it every week as I would a letter from a lady friend."

REPAIRS FOR ALL STOVES and FURNACES

Stove Rods, Paste, Stove Putty, Stove Knobs, Pipe Dampers, Mica, Etc.

Wm. T. Dust Co. . DETROIT.

The GEO. W. COPE,

Stove Pattern Works

Corner Brush and Woodbridge Sts.

DETROIT, MICH.

The Stove Repair "Tip" Is

"BRAUER"

316-318
NORTH THIRD ST.
ST. LOUIS MO.

THE GOBEILLE PATTERN CO.

We design and make beautiful and workable

PATTERNS

For Stoves, Heaters, Boilers and all Cookers

CLEVELAND, OHIO

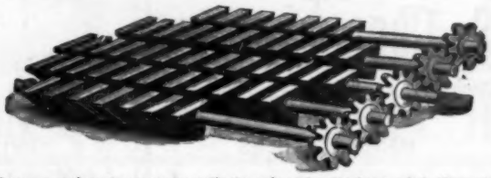
NEW BLOOD——NEW IDEAS.

The MANSFIELD STOVE PATTERN WORKS

MANSFIELD, OHIO.

F. W. REYNOLDS, Proprietor.

Furnace Repairs.



The unusual success of perfect fitting STOVE and RANGE REPAIRS and WATER BACKS for the many different varieties and makes of stoves has led us, after months of preparation, to announce that we have a most complete line of repairs to fit the leading FURNACES, and we shall continue to add new patterns. We guarantee you prompt shipment.

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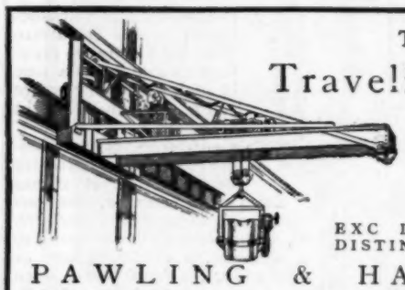

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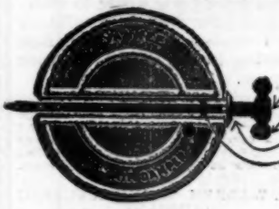
The Best and Easiest Damper to get in or out. Cheapest Damper made. Made also in Oval Shape.



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Steel Rod flattened and turned over handle.

Enameled Wood Handle, can't get out.

Spring and Washer.

This pin keeps washer and spring on the rod.

¼ inch cold-rolled steel rod. Can easily be driven through pipe, making small and same size holes on both sides.

Pin at this point with the one further up on the rod, hold the plate firmly, because they are made with large, elongated head. Steel damper plate.

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You Can't Afford to Make Dampers When You Can Buy the Yankee.

Smoke Pipe Sizes,	3	4	4½	5	5½	6	7	8
PER DOZ.,	.85	.85	.85	1.00	1.10	1.20	1.50	2.15

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PER DOZ.	1.20	1.50	2.15	2.35	2.55	2.80	3.05	3.30	3.50	3.75	5.00	6.00

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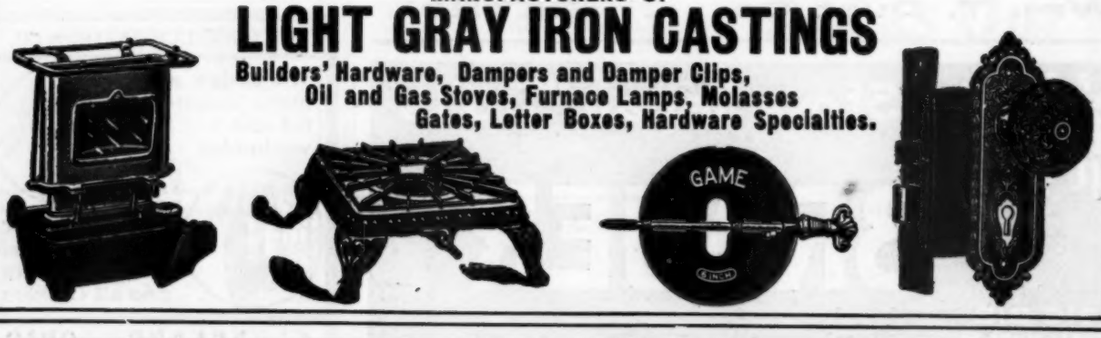

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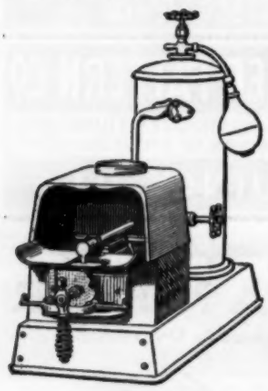

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is designed and manufactured by a Hardware Man for Hardware Men.

¶ You can keep a line of samples of your entire stock on exhibition at all times.

¶ It preserves each article in the same attractive newness that it comes from the factory, *prevents dust, rust, finger-marks and dirt.*

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¶ It improves the appearance of your store *100 per cent;* enables your salesmen to spend their time *selling* goods instead of *hunting* for them, and will *pay for itself in one year.*

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¶ Remember the shelving is made on the unit plan—if you want to experiment—don't wish a complete outfit now—you can buy one—two—three stacks or sections—the rest will follow as your satisfaction increases.

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Eave Trough	Steel Roofing	
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Will not warp like wood.

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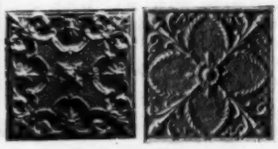

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Dealers everywhere should handle them
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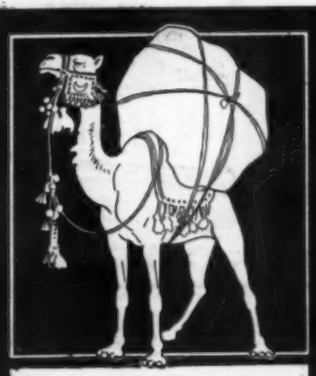

Nature planned the camel for endurance, and without that quality it would be a useless animal.
The same quality makes
OSBORN'S GUARANTEED OLD STYLE
Roofing Plate the standard of merit. It will outwear any other roofing plate made. It is richly coated by the hand dipped process, and is absolutely even and uniform. The coating is not heavier at the drip edge of the plate than elsewhere, but is distributed with perfect evenness.
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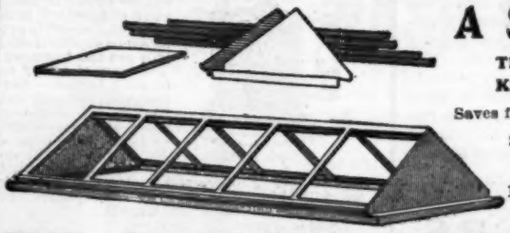

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That can be Shipped KNOCKED DOWN..
Saves freight, saves cost of crating.
Saves troublesome repairs, and is guaranteed in every respect.
Let us send you our Skylight Booklet and quote prices.

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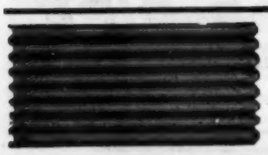

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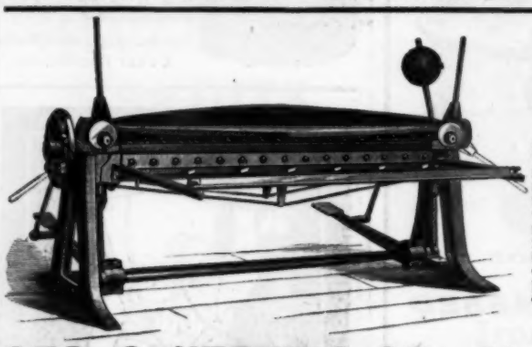

Designed for Cornice and Skylight work.

It has an unlimited squeezing power for locks. The upper jaw is dished to make folds. The shear is attached to the back of the brake and is operated with levers. The blades are attached in such a manner as not to interfere with the usual work of the brake. All the parts are well made and cannot get out of order.

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The improvements in this chimney cowl consist in the iron mountings composed of two pieces only, no pins or wire being required to hold the cap down. The hood is also made on mechanical principles, it having a DEFLECTOR corresponding with the HOOD, by which is formed the sloped opening in the back of the hood as shown in the accompanying cut. The HOOD in connection with the DEFLECTOR fully protects the chimney from rain, sleet and snow, and currents of wind cannot suck downward into it, but on the contrary, when the wind passes through the sloped passage of the HOOD, it creates a strong upward draught, allowing free passage of smoke.

For simplicity, durability and practicability this top is unexcelled.

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The **MF PROCESS** of manufacturing roofing tin originated in South Wales two generations ago; from that time to the present the product of the **MF PROCESS** has been the most reliable and hence the **MOST FAVORED.**

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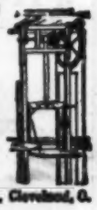

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"Paragon" defined, means a model of excellence. That is why we call our washer "PARAGON". One commendable feature of the PARAGON is a revolving cylinder inside the outer tub. Being made almost wholly of galvanized steel the Paragon is not affected by climatic conditions.

GUARANTEED

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Buy direct and the result is that you receive the **best of good goods** at lowest prices.

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Manufacturers of Pieced Tinware and Specialties.

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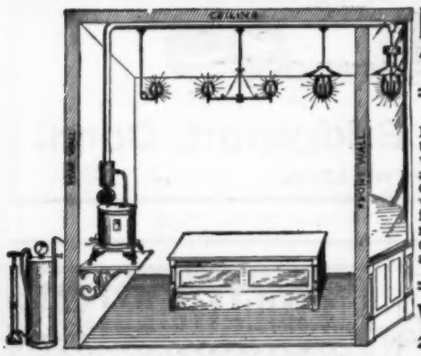
NIAGARA FALLS ACETYLENE GAS GENERATOR COMPANY. NIAGARA FALLS, N.Y.



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Ideal Epworth Acetylene Generators

Are the best, simplest and easiest cared for. . . . .

FOOL PROOF.
Every one warranted. Everybody pleased.
Agents wanted.
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EPWORTH GAS LIGHT & HEATING CO
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Write: "Please stop our ad. for Tinner. The first issue brought results."

The Only ALL STEEL Mower in the World
WHY THE BEST

ALL STEEL one-half lighter.
ALL STEEL one-half light running.
ALL STEEL much more durable.

Write for Catalog of full line of the
GENUINE
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Made only by
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3101 to 3107 Chestnut St., Philadelphia, Pa.

You doubtless try to sell some good
Lawn Mowers
It's easy if you have some of our SELF-SHARPENING KIND.

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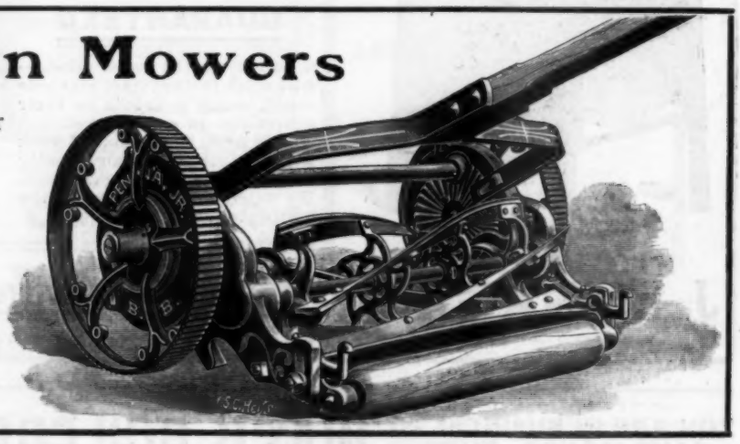
Supplee Hardware Company
Philadelphia



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THE BEST MONEY IN RAZORS EVER OFFERED THE TRADE.

We have established an enviable reputation for our

Cutler's Easy Tools and Cutlery.

Builders' Hardware, Fine House and Bank Trimmings, Sleds, Skates, Snow Shovels, Stove Pipe, Elbows, Coal Hods.

WE MAKE PROMPT SHIPMENTS.

CUTLER HARDWARE COMPANY, Waterloo, Iowa.

FOX SHAVING SETS

Every article in this set is guaranteed. The razor is a Fox, which is known all over as the best made. It retails for $3.

FOX CUTLERY CO.
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Contractors and Manufacturers of

Metal Specialties

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SPECIAL TOOLS,
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The Manufacturing of **BRASS FAUCETS** of any size, style or description is one of our Specialties.

FARMERS! Fruit-growers! Nurserymen!

Here you have it! Simplest, most practical money-saving device of the twentieth century: the

"ALLIER" White-washing and Spraying Machine

for white-washing barns, sheds, henhouses, out-buildings, etc., and spraying fruit-trees and gardens. No trouble to operate: can't get out of order. Does work of twelve men at cost of one man.

Machine No. 5, complete, $5; machine No. 2, complete, $25. Write us and get catalogue by return mail, with special discounts to dealers. Our references—any bank or commercial agency.

THE BASTIAN BRASS WORKS
No. 78 Illinois St.
CHICAGO

"HAS THE TENACITY OF A BULLDOG"

One of the most convenient tools made. Can be used as gas, engineer and side cutting plyers. Forged from the very finest Brescian steel, and has a grip in the end that will hold anything. Send for the "Green Book" of Hardware Specialties for further particulars and price.

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CRONK'S OREGON PATTERN PRUNING SHEARS.

The latest and best fully warranted.

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Rural Routes are going in all around you. You can get this business with the **SIGNAL MAIL BOX**.

It is the original box for Rural Routes with special endorsements of Postmaster General. • The best made, the best liked, the easiest sold and the best advertised.

SIGNAL MAIL BOX CO. 108, BENTON ST.
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The Greatest Stove and Range Wagon Ever Built

Low down. Short Turn. Thousands in use. Ask for Catalogue and Prices.

SHIPMAN, BRADT & CO. - - DE KALB, ILL.

FREE

to anyone for asking **CATALOGUE** showing complete line of

TINNERS' AND ROOFERS' SUPPLIES.

Large stock, great variety, prompt shipments. Get our prices.

BERGER BROS. CO., OFFICE AND STORE, 237 Arch St.; WAREROOMS, 100-02-04 Bread St.; FACTORY, 3114-16-18-20 N. 17th St., PHILADELPHIA.

PATENTED MAY 16, '02.

"HERCULES"

Punch is very strong

Frame being made of semi-steel, punch and die of best tool-steel, and all parts interchangeable. Will punch one-quarter inch hole. Can be had in six sizes—specify sizes wanted. 50 pounds pressure on the handles increased to 1,000 pounds punching force. 100 pounds pressure increased to 2,000 pounds punching force.

Set of three dies furnished with each punch.

H. WEISS & CO., Tinners Supplies. 20 Cliff St., New York.

BOWL.

Largest and Best Equipped Factory in the South for the Manufacture of

SAD IRONS, Country and Stove HOLLOW WARE, Ground and Unground; SUGAR KETTLES, ENGLISH POTS, Castiron SHOE LASTS and STANDS, KITCHEN and CORNER SINKS, GRATES, ETC.

REVERSIBLE CAST IRON SHOE LASTS AND STANDS.

WHY NOT WRITE FOR OUR CATALOGUE? It cannot fail to prove of interest and value to you

ECCENTRIC STOVE KETTLE.

Blacklock Foundry

SOUTH PITTSBURG, TENN.

U.S. INFALLIBLE METAL POLISH

IN PASTE, LIQUID OR POWDER

FOR ALL KINDS OF METALS

Best, Cheapest, Goes Farthest. Never dries up or shrinks. Money makers for everybody. Sold by the jobbing trade. Samples free by mail. Address

GEO. W. HOFFMAN, Manufacturer

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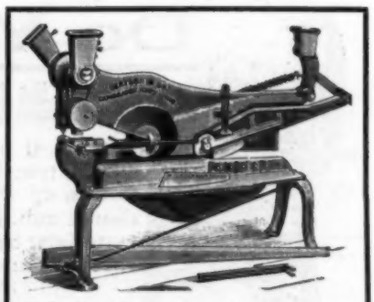
119 E. Madison St., CHICAGO, ILL.
503 Montgomery Ave., SAN FRANCISCO, CAL.
Established 12 Years.

"Nothing except the mint can make money without advertising."—Gladstone.

"Yankee" Drills

Sold by Leading Jobbers.
Send for "Yankee" Tool Book.

North Bros. Mfg. Co., Philadelphia, Pa.



Tools for Sheet Metal—Shears, Punches and Forming Rolls

BERTSCH & CO., Cambridge City, Indiana

Ebony, Ivory, Coral or Amber Handle, $2.00 per dozen.

Pearl or Stone Handle, $3.00 per dozen.

We will send two dozen prepaid in a handsome plush lined cherry tray to any dealer, on consignment, to be returned at our expense if found unsaleable. We could not do this if they were not the best selling novelty in the hardware trade. It costs you nothing but a 2c slamp to try them. Drop us a line and we do the rest.

DAVISON MFG. CO.
112 Front St. Brooklyn, N. Y.

No Dirt. No Dust.

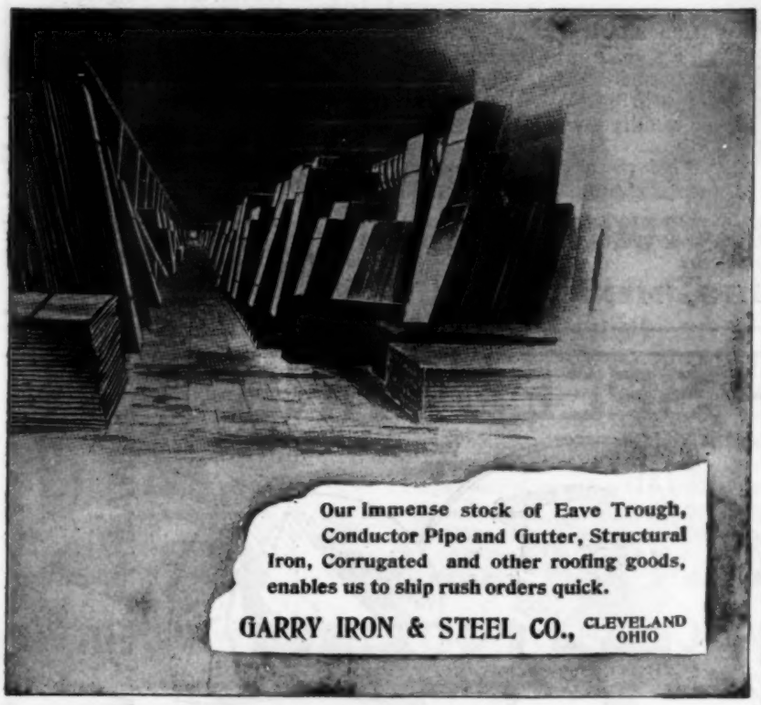
Pleases Everybody. Quick Seller. Good Profit.
Send for Price.

HILL DRYER CO.,
400-410 Park Ave.,
Worcester, Mass., U.S.A.

ROOFING SLATE

We operate our own quarries, manufacture and sell all grades of Slate Roofers' Suppli s, Tools, Cement, Nails, Felt. Write for delivered prices.

THE AULD & CONGER CO.,
Cleveland, O.



It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application.

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades.

Address

DANIEL STERN
69 Dearborn St., - CHICAGO

"Eagle" Brand Copper Rivets and Burrs

STANDARD FOR QUALITY. (Lake Superior Copper)
MANUFACTURED BY

THE PLUME & ATWOOD MFG. CO.

29 Murray St., NEW YORK 196 Lake St., CHICAGO, ILL.

Do You Know

That the O. K. WASHING MACHINE

is the best made, the lightest running and the most attractive washer on the market? *Are you selling it? If not, why?* Every first-class dealer should sell it, because it is made of the best materials, by the best mechanics that can be obtained, and every one sold will sell another.

Write us for Circulars and Prices.

H. F. BRAMMER MFG. CO. Dept. B. DAVENPORT, IOWA

If you are not handling the

B. B. Rotary Roller Gearing Washer

YOU ARE LOSING MONEY.

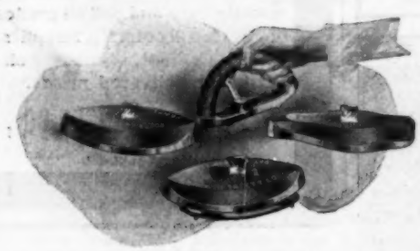
Best on the market, well made, light running, powerful, durable.

WORKS SO EASILY A CHILD CAN OPERATE IT.

Why not let us tell you more about our machines? We make half a dozen styles.

THE BENBOW-BRAMMER MF.G CO.
ST. LOUIS, MO.

Safety Lock Sad Irons



The only Sad Iron made that has a positive lock and cannot come unfastened or detached; being a solid iron it retains its heat longer than semi-solid irons; finish and quality unexcelled : : :

Ask your jobbers or write for circulars and prices.

FAWKES MANUFACTURING CO.
INCORPORATED
MINNEAPOLIS, MINN.

BOLT and SCREW CASES

"Revolving" are in use and giving perfect satisfaction in all first-class hardware stores, machine shops, pattern shops; in fact, any store or shop where bolts and screws are sold or kept in stock. For sale by the leading hardware jobbers.

For special descriptive catalog and low prices address the manufacturers.

American Bolt & Screw Case Co.
DAYTON, OHIO, U. S. A.

THE LEONARD CATALOG CABINET

Offers the Best System for the care of Catalogues.

Made of Oak, front quarter-sawed and highly polished. Size 32 in. wide, 24 in. deep, 63 in. high. Has compartments for every size of catalogue. Every space is numbered and catalogues are arranged in the space they fit closely; catalogues are then given the same number as their space, and same number entered on the card index with titles. There is also a cross index for articles. This system is the outgrowth of a long experience and the benefits derived from it are enormous. Send for colored circular and full description.

Price, with the two Card Indexes.... $25.00
Price, with Leonard System for buyers added..... 35.00

LEONARD MANUFACTURING CO.
34 Market St., Grand, Rapids, Mich.

The "Weber Junior" Pumper

Can also be used for other power purposes.

is all complete, ready to attach to pump. Equals 30 men pumping water. Uses but little gasoline. Is shipped crated completely erected, all connections made. Easy to start, any one can operate it. Every one guaranteed. Other sizes up to 50 H. P. Send for catalog. Weber Gas & Gasoline Engine Co., P. O. Box 225 Kansas City, Mo.

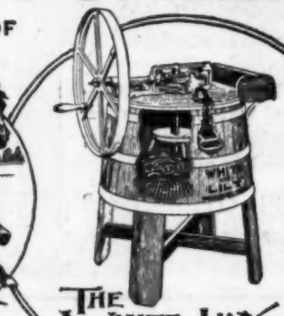
HIGH SPEED WINS

A BUNCH OF WORLD BEATERS

WHITE LILY WASHERS

LOU DILLON

HOLDER OF THE WORLD'S TROTTING RECORD; TIME 1:59 1-2



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1903 WINNER OF THE INTERNATIONAL CUP BEATING SHAMROCK III FOUR STRAIGHT HEATS

WASH LILY WHITE

HOLDER OF WORLD'S RECORD FOR CLEAN, FAST, EASY WASHING

THE ONLY HIGH SPEED WASHER ON THE MARKET

TOLEDO, OHIO — THE WHITE LILY WASHER COMPANY — DAVENPORT, IOWA

SHOVELS

Prices quoted to dealers. Quality absolutely guaranteed.

Scoops and Spades, Ash Shovels, Snow Shovels, Sidewalk Scrapers, Cooking Utensils.

The latest, strongest and best smooth back shovels in the world. Others not in it for work and wear.

THE AVERY STAMPING CO., CLEVELAND, OHIO.

THE ORIGINATORS AND ONLY MAKERS OF "NEVER-BREAK" GOODS.

By Test the Best!

OVER ONE HUNDRED THOUSAND IN USE

We sell to only one dealer in each town. Write us.

Once Sold They NEVER Come Back

Distributing Points

Philadelphia, Pa
Columbus Ohio
Sioux City, Iowa
Indianapolis Ind
Albany, N. Y.
Milwaukee, Wis.
Council Bluffs, Iowa.
Kansas City, Mo.
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Peoria Washing Machines

Best in the Market—Made with Ball Bearings

Have a Compound Lever Handle which greatly reduces the work of wash days. The motion used in vibrating the handle takes the strain from the back and lets the arms do the work with a great reduction in labor.

Send for Catalogue. Secure the Agency.

CLARK, QUIEN & MORSE
PEORIA, ILL.

"1900"

The "1900" Ball Bearing Washer is the simplest, easiest and most efficient machine for washing clothes ever invented.

Our washers are the best made and most satisfactory machines in the world. They work on an entirely new principle. There are no wheels, paddles, rockers, cranks or complicated machinery to get out of order. They revolve on ball bearings making them by far the easiest running machine made.

We Want One Dealer In Every Town.

"1900" "DOMESTIC" "1900 JUNIOR" "HOME"

EACH A WINNER.

We advertise liberally in magazines and refer all inquiries to nearest dealer. Send for Catalogue.

The 1900 Washer Co., BINGHAMTON, N. Y.

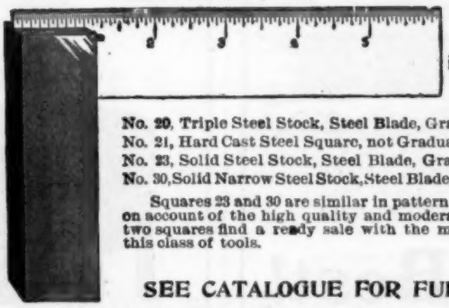
Stanley Rule and Level Co.

IMPROVED CARPENTERS' TOOLS Sold by All Hardware Dealers

NEW BRITAIN, CONN.

DISSTON MACHINISTS' SQUARES.

No. 20 STEEL SQUARE.



Trued inside and out

QUALITY SUPERIOR

FINISH ACCURATE

No. 20, Triple Steel Stock, Steel Blade, Graduated, 1-32-in.
No. 21, Hard Cast Steel Square, not Graduated.
No. 23, Solid Steel Stock, Steel Blade, Graduated, 1-16-in.
No. 30, Solid Narrow Steel Stock, Steel Blade, not Graduated.

Squares 23 and 30 are similar in pattern to No. 20 and on account of the high quality and moderate price these two squares find a ready sale with the mechanics using this class of tools.

SEE CATALOGUE FOR FULL LINE.

HENRY DISSTON & SONS

INCORPORATED

KEYSTONE SAW TOOL, STEEL AND FILE WORKS

PHILADELPHIA, PENNA.

American Family Scale

BEST IN THE WORLD.

It is made of STEEL, TIN or BRASS Scoop Top.

A most beautiful and attractive scale for all purposes. Beautifully enameled, ornamented and striped. Weighs 20 pounds by ounces. Occupies but little space. Is light and easily moved. It can be regulated by turning the brass screw on top. It is always ready and easily understood. It is a convenient scale to use, and has no weights that may be lost. You can look this one in the face to prove its accuracy without looking for weights. Every scale examined before leaving the factory and warranted correct.

MANUFACTURED BY

AMERICAN CUTLERY CO.

CHICAGO, ILLINOIS.

UNION BRICK HANDLER

A Money Saver.

Full size sample.

Delivered-Express

$3.50

Union Brick Bond Co., PITTSBURG, PA.

H. G. LEWIS,

Portage, Wis.,

writes:

"Please discontinue the ad. for help wanted. Replies have come in from all quarters."

Measuring Tapes

Steel, Metallic, Linen, etc. Our Goods are Recognized as the Best. Tinners' Rules, Magic Pattern Rules, etc. Send for Catalogue and Mention The American Artisan.

Lufkin Rule Co.

SAGINAW, MICH.

BABY HURWOOD

(Cut Exact Size.)

Extra quality Crucible Steel of 7-32 in. diameter. A handy little tool for the vest pocket, which will work a good sized screw. Made only in one size. **$3.50** Per Doz.

THE HURWOOD MFG. CO. (INC.), Plantsville, Conn., U. S. A.

Sausage Stuffer, Lard and Fruit Press with Patented Corrugated Spout

8 Sizes and Styles

Meat Juice Extractor

No. 21 $2.50

Bone, Shell and Corn Mill

No. 750 $8.50

N. Y. Branch, 10 Warren Street

ENTERPRISE

Food Choppers

TINNED

No. 100 *chops 2 lbs. of Meat per minute* $1.50
No. 300 *chops 3 lbs. of Meat per minute* $2.25

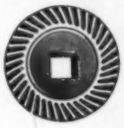
Four Knives with each Machine

Fine

Medium

Coarse

Nut Butter Cutter



Order from your Jobber — Illustrated Catalogue Free

The Enterprise Mfg. Co. of Pa.

Philadelphia, Pa., U. S. A.

Rapid Grinding and Pulverizing Mills

40 Sizes & Styles for Hand, Steam & Electric Power

No. 3 $5.50

Raisin Seeder

No. 36 $1.00

Cold Handle Polishing IRONS

No. 82 $7.50 doz.

San Francisco Branch, 105 Front Street

The Freezer A Woman Wants

is the Freezer to sell. The Freezer every dealer wants is the Freezer every woman wants, because it is the easiest Freezer to sell. The

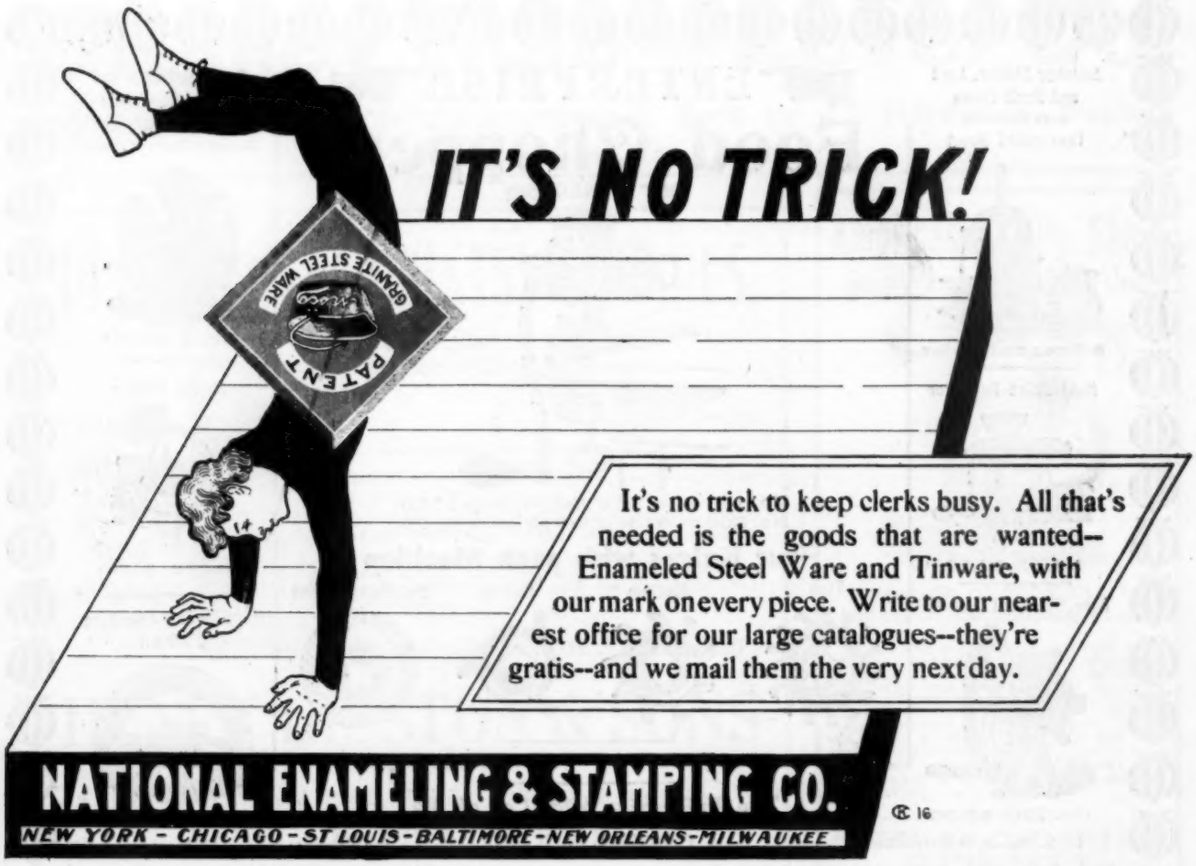
White Mountain Freezer

is the favorite because it will produce better results more economically with less labor and in less time than any other. More jobbers and retailers sell more White Mountain Freezers than all other kinds combined.

It is profit, satisfaction and prosperity, because the "White Mountain" is the Standard Freezer of the world.

SEND FOR CATALOGUE

THE WHITE MOUNTAIN FREEZER CO., Nashua, N. H.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GRANITE STEEL WARE
PATENT
It's no trick to keep clerks busy. All that's needed is the goods that are wanted--Enameled Steel Ware and Tinware, with our mark on every piece. Write to our nearest office for our large catalogues--they're gratis--and we mail them the very next day.
NATIONAL ENAMELING & STAMPING CO.
NEW YORK - CHICAGO - ST LOUIS - BALTIMORE - NEW ORLEANS - MILWAUKEE

ABSOLUTE PURITY
IN KITCHEN UTENSILS
FREEDOM FROM POISON
is hereby guaranteed
WE
MAKE
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NICKEL-STEEL WARE
1520
KINDS
The Blue Label on every piece proves our statement.
When you buy Kitchen-Ware, buy
AGATE NICKEL-STEEL.
LALANCE & GROSJEAN MFG. CO.
New York Boston Chicago

PRIZE COMPETITION

Open to Sheet Metal Workers

IT has been and is our aim to design and build **New and Improved Tools for Tinsmiths and other Sheet Metal Workers**, as demanded by altered conditions, and numerous modern tools that we put on the market attest to our success in this direction. Realizing that the users of tools know best what they want and should have, we have decided to offer six prizes for the best suggestions of new tools that will be useful in shops of sheet metal workers, or desirable improvements on existing tools:

1st Prize, $50.00 Cash.
2nd " 1 30-inch Excelsior Squaring Shears.
3d " 1 30-inch Keystone Bar Folder.
4th " 1 No. 2 Waughs Circle Shears.
5th and 6th Prize, 6 Medium sized Buffalo or Niagara Snips.

It is not necessary that participants in the competition construct the tools or improvements that they suggest; clear explanation of their object will entitle them to consideration.

Communications will be received until **April 30th, 1904**, and the prizes will be awarded on May 1st, 1904, by a committee consisting of the Superintendent of our works and two practical tinsmiths. Names of the prize winners will be published in these columns about June 1st, 1904.

NIAGARA MACHINE & TOOL WORKS

Mfrs. of Tools for Sheet Metals **Buffalo, N. Y.**

Are You a Dead One?

Then You Should Do One of Two Things.

1. Write to Joseph Karwowski, Herkimer, N. Y., who was granted a patent on January 7, for preserving the dead in blocks of glass, making them desirable parlor ornaments.

2. Or else write to the Lee-Glass-Andreesen Hardware Co., Omaha, Neb., and lay in a line of goods that are money-makers as they are offered you at prices that enable you to make good margins, are specially adapted to your section and are shipped promptly.

TO SUMMARIZE

If you are going to stay dead, for heavens sake be ornamental, at least.
If you want to be alive again, connect with a live jobber.

YOU WOULD BE SURPRISED
AT OUR PRICES FOR
ROOFING TIN
If you had an idea of the quality. The fact that we make all our own plates explains why we can furnish such material for the price. A postal will get you sample set "A."
THE McCLURE COMPANY
PITTSBURG PHILADELPHIA
MILLS: Washington, Pa.

STEVENS FIRE ARMS

Are the Popular line on the Market and no Retailer can afford to be without them.
YOUR JOBBER CAN SUPPLY YOU.
SEND FOR CATALOG.
J. STEVENS ARMS & TOOL CO.
197 Main St.,
CHICOPEE FALLS, MASS.

BRADLEY SHELF BRACKETS
STRONG, LIGHT AND ALL RIGHT
ATLAS MFG. CO. NEW HAVEN, CT.

THE "CENTENNIAL" Rain-Water Cut-Off

The strongest, most durable and cheapest CUT-OFF on the market.
The only single Cut-off made to fit CORRUGATED and Plain Pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers. Patent applied for. Manufactured only by
COONEY & GEIGER,
19 and 21 E. South Street
INDIANAPOLIS, INDIANA.

"PULLMAN" Sash Balances

Are you selling them?
In use everywhere.
Look for the Metal Tapes in All New Buildings. . .
Folder No. 2 sent free.
PULLMAN MFG. CO.
Rochester, N. Y., U.S.A.

AGENT WANTED
Good man in every county to sell
OSGOOD FARM and STOCK SCALES
most complete line made. 1903-4 Patterns Steel Lever Stock Scales are beauties. Prefer man experienced in selling machinery and implements. Fine Catalogue. No samples. Can be handled nicely as side line. Liberal contract. Exclusive agency. Have you that man in mind? Show him this paper. He can make Money. We want him now. Act quick.
OSGOOD SCALE CO., Binghamton, N. Y.
Largest Makers of Farm Scales in this Country

The "STAR" Ventilator

Storm-Proof. Effective. For ventilation of all kinds of buildings both public and private.
MERCHANT'S METAL "SPANISH" TILES AND "GOTHIC" SHINGLES
Are the most Ornamental Roofing made in metal. We are makers of High Grade Roofing Tin.
Illustrated Booklets of TILES and VENTILATORS will be mailed free upon application.
Philadelphia New York — MERCHANT & CO., Inc. — Chicago Brooklyn
SOLE MANUFACTURERS

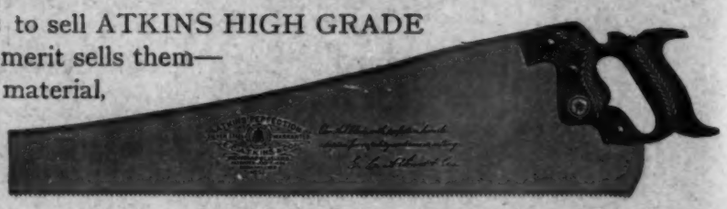
WE ARE NOW OFFERING
Eave Trough and Conductor Pipe
FOR SPRING DELIVERY
WRITE US FOR PRICES
ILLINOIS ROOFING & SUPPLY CO.
23 Lake Street, CHICAGO

Champion Stove Clay
The only Stove Lining made of crucible materials.
Packed in 2½ lb., 6 lb. and 10 lb. pasteboard boxes.
Order it from your jobber.
The best and most refractory lining made.
BRIDGEPORT CRUCIBLE CO.
BRIDGEPORT, CONN.

The "Globe" Ventilator
In Brass, Copper, Galvanized Iron, and with Glass Tops for Skylight purposes.
For Perfectly Ventilating
Schools, Churches, Halls, Mills, Factories and Audience Rooms of Every Character.
Smoky Chimneys Cured.
"Globe" Ventilated Ridges. Send for Pamphlet.
Manufactured by
Globe Ventilator Co., Troy, N.Y.

IT'S EASY TO SELL ATKINS SAWS

You need no extra trade inducements to sell ATKINS HIGH GRADE SILVER STEEL HAND SAWS. Their merit sells them—and they stay sold. They are perfect in material, temper and workmanship. They're true clear through.



ATKINS ALWAYS AHEAD

ATKINS No. 53 with PERFECTION handle is the most perfectly balanced hand saw made. It's a perfect beauty.
"The Saw That Sells Itself." We make Cross-Cut, Hand, Wood, Butcher and small saws—all kinds.
WRITE FOR CATALOGUE AND PRICES
E. C. ATKINS & CO., Indianapolis, Ind.
BRANCHES: Memphis, Tenn. Minneapolis, Minn. Atlanta, Ga. Portland, Ore. Seattle, Wash. 30 Front St., East, Toronto, Ont. Chicago, Ill. 64 Reade St., New York City